

'Dangerous myth' of the OU

by Maggie Richards
Claims that the Open University provides a cheaper and more open form of higher education than conventional universities have been denounced as "a dangerous myth". In a paper published recently Mr John Mace of the Economics of Education Department at London University's Institute of Education questions the results of studies showing the OU's superiority in both fields.

Mr Mace finds that previous reports have suffered from "serious methodological shortcomings" and suggest an alternative means of evaluating the OU.

Challenging the 1977 report, the most recent, which claims that OU costs are one third of those of conventional universities, he argues that the economic benefits of an OU degree will be below those of a degree obtained from a conventional university. Adjustments to take account of this fact could well show that conventional universities produce a higher economic return than the OU.

In examining the effectiveness of the OU as an open institution, compared with conventional universities, Mr Mace looks at age, education, class and sex aspects.

On age he comments: "The OU has a much higher proportion of older students than conventional universities. Does this mean it is more open? If we define openness in terms of the students' age distribution, the figures suggest that the OU is more open to older students, but less open to younger students."

Mr Mace also regards other evidence of increased opportunities for students without formal qualifications as misleading. Two thirds of the OU students surveyed possessed qualifications including admission to conventional universities. Of the remaining third, only half achieved an ordinary degree.

"This means that below 15 per cent of all OU ordinary graduates were educationally disadvantaged. To demonstrate the relative openness of the OU it would be necessary to compare these percentages with the unqualified who enter conventional universities and other degree-awarding institutions and go on to secure degrees. This evidence is not provided," he adds.

On class composition Mr Mace says: "No one can quarrel with the claim that the OU offers relatively greater educational opportunities to people whose parents are in lower social classes—one important aspect of openness. However, it is important to distinguish this claim from another: that the OU is a more effective agency than conventional universities for opening educational opportunities to members of the working classes."

If the class of Open University students is measured by their occupations, and compared to the class origins of conventional university students, the latter appear to be

more open with 29 per cent of students as opposed to 5 per cent coming from the working classes.

"What is an appropriate measure of equal access to educational opportunities for students at conventional universities may not be an appropriate measure for OU students."

Dealing with sex composition, Mr Mace compares the figures for women obtaining an ordinary degree with the OU (14 per cent) and honours graduates (30 per cent) to those of the conventional universities (31 and 33 per cent respectively).

He suggests a new evaluation of the OU based on cost-effectiveness analysis, which would take into account those university objectives it would be impossible to measure in financial terms.

As an example, Mr Mace examines the role of broadcasting in the OU system, and concludes that it is not a very effective medium. He cites class tutorials, the subjecting of a number of central academics by a "hiring-in" process, and the system of course remakes as areas in which cost-effectiveness analysis could be applied.

Mythology in the Making: Is the Open University Really Cost Effective? by John Mace, published in *Higher Education* Vol. 7, No. 3, Elsevier Scientific Publishing Company, PO Box 211, Amsterdam, Holland.

Universities may have to pay wage increases of up to 36 per cent if technicians are successful in claiming that they are worse paid than their equivalents in other jobs. The Association of Scientific, Technical and Managerial Staffs, which represents 13,000 technicians in the universities, has made a claim under Schedule 11 of the Employment Protection Act.

Under the Act, if they can show that they are paid less than workers outside in the same category, an award is made which becomes a term of the contract and the employers are bound to pay it. Mr Rog Bird, a national officer for ASTMS, calculates that the shortfall between university technicians and others in similar jobs, at October 1, 1977, ranges between 22 and 36 per cent.

At the same time the technicians are preparing a pay claim which will take account of the movement of earnings since last October. The two demands together could add up to a 40 per cent claim.

Their wages vary according to eight grades. The minimum starting point, excluding trainees, is from £2.195 per annum. Those on grade 5 would start at £3.186 per annum. The majority are on grade 5 or less and a few are on the top grade, in full



The new Ilkley College of Higher Education was opened last week by Councillor Arthur Triggs, Lord Mayor of Bradford. The college, formed by a merger of the former Ilkley and Bingley colleges of education has a proposed intake of 1,000 students.

Technicians claim 36 per cent under Employment Act

by Ngau Crequer
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by directors claim CNAAs exceeds responsibility on validation

Minister brought into Teesside row

by David
John O'Leary
The directors have taken dispute with the Council for Academic Awards over its critical report on Teesside as the Secretary of

David Beethel, chairman of the Council of Directors of Polytechnics, has written to Mrs Kerr expressing "grave concern" about the unauthorized leaking of the CNAAs report to the press.

The report, the most critical ever issued by a council inspection, was issued in July 1977. It was a substantial improvement was made by the Council for Academic Awards, which is seeking a meeting with the CNAAs Local Authority leaders to discuss the public disclosure of the report before Teesside's maintaining authority, Cleveland, had been given a chance to comment.

The Teesside argument will have a critical impact on a new attempt to launch the CNAAs to allow polytechnics and colleges to play a

bigger part in validating their own courses. The CDP wants "mature" institutions to have considerable independence. It is advocating a system of validation by licence, where the CNAAs would delegate its charter responsibilities to licensed institutions, or a change in the council from a validating body to a national accreditation agency.

A working party is to reconvene in early December and it is hoped that approval for changes in present procedures will be obtained by February of next year.

Two papers have been prepared, one listing the various alternatives considered during the three years of talks under the title of Partnership in Validation, and the other put forward a modified version of proposals withdrawn earlier in the year. These were criticized for being over-elaborate and have been simplified for further consideration.

The new talks will start in an atmosphere of controversy, with some polytechnic directors openly expressing their desire for complete independence from the CNAAs and some college principals complaining that the adoption of new course

regulations has pre-empted the exercise. Members of the Diploma in Higher Education Group described the regulations as "cumbersome and complex" and feared they would impinge on validation procedures.

Previous discussions have come to nothing because members have been divided not only on the need for new methods of validation but also on the principles on which any changes should be based.

One school of thought has always favoured the devolution of responsibility in a limited number of "mature institutions" to a panel appointed for a specific period and including CNAAs representatives. The other has been to assess subject areas and establish similar panels only for specific parts of institutions, leaving the CNAAs subject boards in overall control. Proposals along these lines were rejected in 1976 in the first round of the partnership talks.

Dr Edwin Kerr, chief officer of the CNAAs, said that there had been an attempt to bring the two sides closer together.

Contents

Writer in residence



John Wain, the former Oxford poetry professor and novelist, argues that universities should provide writers with sympathetic settings, not secure jobs, 11

Coping with the dole

Maggie Richards describes an imaginative project at Bradford College to help the unemployed, 8

Only connect

Simon Midgley discusses the much broader philosophy of the reformed *New Universities Quarterly*, 10

William Empson

Denis Donoghue reviews two new books on the poetry and criticism of William Empson, 15

Biology and medicine

Genetics, virology, and aging are among the subjects of new books on the biological sciences, 18-23

Paid educational leave

Tom Schuller draws a parallel between the increase in paid holidays 50 years ago and the growing demand today for time off work to study, 13

Academic developments	4
North American news	5
Overseas news	6
Books	15-23
Noticeboard	24
Classified Index	25
Don's diary	34
Letters	35

TUC wants to talk on reopening of Fircroft

Hopes for the revival of Fircroft adult education college at Birmingham have been raised this week by the TUC's education committee seeking discussions on new proposals for the reopening of the college, closed three years ago following student unrest.

Originally the TUC insisted that it be given a simple majority on the college's governing body, before agreeing to support the re-establishment of the college. This policy led to the intervention of the Charity Commission, which suggested such an arrangement might jeopardise Fircroft's liberal tradition.

Recently the commission issued new proposals to overcome the deadlock, involving equal representation for all interested parties in three vital areas: the curriculum; appointment of staff; and college facilities. Under the new scheme the TUC would be allowed its simple majority.

On Tuesday the TUC's education committee decided that the proposals could form a basis for further discussions, and resolved to seek talks with the commission, in conjunction with the college trust, to be ratified by the TUC general council, which meets later this month.

A spokesman said: "We think what is being suggested now is something that might form the basis for agreement. There are some points which we would want clarified, and some things with which we don't agree. But we want to find out what the commission proposals mean in certain areas, and how they would be interpreted."

One of the issues the TUC is anxious to discuss is the way in which the equal majority system would operate in the three specified areas. In particular, there is concern that the device should not hinder day-to-day decisions by the academic board on the curriculum.

The TUC is also worried by the commission's suggestion that all residential places at the college should be allocated to students attending one year courses.

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Frivolous claim costs lecturer £1000

Dr Margherita Rendel, a lecturer at the University of London Institute of Education, has been ordered to pay £1,000 costs for acting frivolously and vexatiously in pursuing her claims under the sex discrimination laws.

Dr Rendel appealed to an industrial tribunal under the Sex Discrimination Act, 1975 and the Equal Pay Act, alleging that she was paid less than men doing the same work at the institute and that she had not been promoted beyond the position of lecturer because of her sex.

After a long hearing she agreed to fully withdraw all the allegations and the tribunal held that there was no discrimination or policy of discrimination on the grounds of her sex and that she had not been promoted because of her sex.

It is extremely unusual for a tribunal to award costs against an applicant; it must be satisfied that the person has acted frivolously or vexatiously. In her judgement, Mrs Stella Hollis, chairman of the tribunal, said: "It was clear for all and anyone to see that the male comparables (a professor, a senior lecturer, a senior researcher and a lecturer with departmental headship responsibilities) with whom she was comparing herself, were in no way comparable."

Mrs Hollis criticized Dr Rendel for the lack of organization in the documents she submitted, the lack of relevance to the case in the evidence given by her witness and herself, an attempt to filibuster, and repetition.

She was ordered to pay the whole of the costs, limited to the sum of £1,000. Dr Rendel would make no comment this week.

Poly must pay £20,000 costs

by Peter David
An estimated £20,000 legal costs incurred during last May's High Court battle over the admission of a social work student at North East London Polytechnic will have to be paid by the polytechnic's maintaining boroughs, its director, its governing body chairman and a former chairman of its joint education committee.

Mr Justice Slade ruled this week that the six parties would have to meet the costs of the Central Council for Education and Training which brought the action, as well as "students of a former lecturer," a student representative, and Mr Vyss, the student at the centre of the affair.

The CCETSW instigated legal proceedings after a long-running dispute at the polytechnic, which admitted Mr Vyss as a student despite his having been twice rejected by members of the social work staff. Mr Vyss was an employee of Newham, one of three boroughs maintaining the institution.

At the trial Mr Justice Slade ruled that the polytechnic had been wrong to enrol Mr Vyss by "executive action" as a result of pressure by the maintaining boroughs. He particularly criticized Dr George Brown, the director, for his handling of the affair.

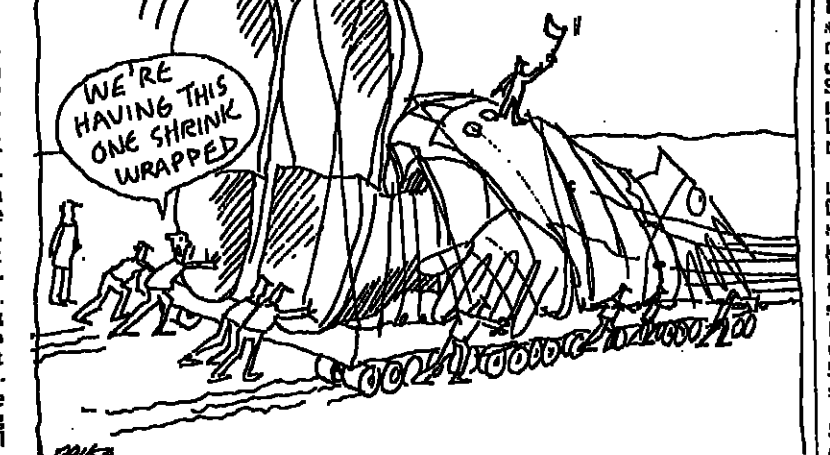
A special panel set up to interview Mr Vyss after the judgment declared that he was probably able to complete a social work course successfully, but would be advised to apply to another

Frankly, this free-through rabbit pays

by Ngau Crequer
While he was browsing round a bookshop that Martin Bone was in the idea that could eventually pay for his early retirement.

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Mr Carter gets 1-1 draw with Congress on Bills

from Clive Cookson
WASHINGTON
The United States will not after all get a Federal Department of Education next year. Congress failed to pass President Carter's controversial plan for the new cabinet-level department before breaking up for next month's mid-term elections.

However, that defeat for the administration was balanced by the fact that tuition tax credits, which have been opposed vehemently by Mr Carter and almost all the country's educational groups, also died in the 95th Congress's frantic week-end-long closing session.

Instead of tax credits for tuition fees, Congress passed the Middle Income Student Assistance Act—a \$1.5 billion expansion of existing student grant and loan programmes requested by the President and supported by higher education lobbyists.

Both schemes were supported by a majority of Congressmen and would have been passed in some form by the present Congress, given sufficient time.

Tuition tax credit Bills did in fact pass both the Senate and the House of Representatives but critical differences between the two versions of the legislation could not be resolved in time. The Senate version was a tax credit only for undergraduate and vocational education, while the House insisted on extending the measure to elementary and secondary education too.

President Carter had threatened to veto any form of tuition tax credit, which the administration and the higher education community see as a politically popular but very inequitable way of helping middle-class Americans meet the rising costs of education—wealthy families who do not really need help would have received much of the benefit.

The passage of President Carter's Middle Income Student Assistance Bill, for which the higher education community lobbied furiously as an alternative to tuition tax credits, raises the eligibility limit for basic student grants from the present \$15,000 to \$25,000 a year (net family income).

Social science research cut by £800,000

Big cuts in government funding for social science research have been approved by the Department of Education and Science. The Social Sciences Research Council has been told that its budget next year will be pruned by 5 per cent in real terms, a cut of some £800,000.

Mr Derek Robinson, chairman of the SSRC, said there appeared to be four reasons for the reduction in spending. The council's budget had grown continuously for three years; it had underspent its allocation for two years and there had been a shift of priorities in the Advisory Board for the Research Council, with increased money going to the Science Research Council for "big science" projects.

A fourth reason was that the SSRC, one of the newer research councils, had received favoured treatment in its early years and had "nursed the age of puberty". But the size of the cut has undoubtedly surprised the SSRC, which had expected a modest growth of 1 per cent in real terms next year. Instead, its budget is to fall from a current allocation of £15,570,000 to £14,770,000 at constant prices.

This represents a fall in real terms of 5.14 per cent compared with the current year, and more than 6 per cent compared with what it had expected.

The reduction in grant coincides with a dispute between the DES and the SSRC over the extent of departmental interference with major research allocations. The DES has recently made important modifications to two grant proposals put forward by the council.

Particular importance is being attached by the council to a DES decision to grant only two years' support to the SSR Survey Archive based at Essex University, directed by Professor Ivor Crewe. The council had asked for a five year period of approval. A second disagreement has arisen over a DES decision to limit to one year approval for the council's grant to the UNESCO documentation centre in Vienna. The SSRC had asked for three years.

Finally, the DES is empowered to veto international affiliations by the SSRC, and expenditure on projects costing more than £50,000 in one year or £100,000 in total.

Iranians learn pupil power

Forty Iranian civil servants taking a crash course in finance at Birmingham University also learned a little bit about British industrial methods—and successfully boycotted an examination by withdrawing their "bonus" from their government.

The students are the second year intake on a two-year "certificate in finance" course, the result of an arrangement between the university and the Iranian government.

They are employed by the Iranian Ministry of Finance and Economy and will return to their country, with promotion prospects, once they have been inducted into the realm

of high finance. The Iranian government pays fees of £2,500 a year per student, plus board and lodging.

The problem arose because the first year's intake, some 50 students, were given a bonus "to have a good holiday." The second year's intake demanded the same. When it did not seem forthcoming they boycotted one of their papers. There was a discussion between the students and a representative of the government, and the bonus was agreed and the university laid on the examination for the second time, which the students sat.

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County earmarks £1m for Teesside

Cleveland County Council is to make a big injection of funds into Teesside Polytechnic in light of the recent threat by the Council for National Academic Awards to suspend recognition of the institution in 1980.

The precise amount to be given to the polytechnic will be decided after a three-man committee of governors reports to the governing body at the end of the month. But the authority's education finance sub-

committee agreed last week to earmark £1m over the next two years as a contingency fund to supplement the polytechnic's revenue budget.

A special meeting of the full county council also gave support in principle to a pledge to provide the polytechnic with "substantial increases" in funding, provided that all new expenditure was justified in detail by the polytechnic's officers. But the promises of support came

against a background of continuing recommitments. Mrs Lilian Thompson, education committee chairman, took advantage of last week's meeting to disclaim responsibility for the delays.

On Monday a working party met to discuss terms for the early retirement of Dr John Houghton, the polytechnic's director. Meanwhile, the Association of Polytechnic Teachers has circulated a personal plea in support of a personal chairman, Dr A. W. Taylor.

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£2m for computing and marine technology study

by Robin McKie
Science Correspondent

The Science Research Council has announced two major projects which are to cost more than £2m. The first is a research programme into distributed computing systems which is to cost £1.4m and the other is a £828,000 project on marine technology.

The computing programme is expected to run for more than five years and is aimed at understanding the principles of distributed computing systems and the engineering techniques needed to implement them effectively. In these systems a number of autonomous but interacting computers cooperate on a common problem. Programmes could include geographical networks of mainframe computers; systems containing arrays of microprocessors; and new forms of computers with integrated integration of processing and storage.

Research work currently consists of 23 interrelated projects and will be particularly concerned with analysing information processing systems and storage. Some of the centres involved include University College London, Newcastle University, Warwick University, Manchester University, Westfield College, London, Queen Mary College, London, and East Anglia University.

The three-year programme is a multi-disciplinary research into marine technology prob-

lems will be carried out by the North West Region Marine Technology Consortium. This consists of the universities of Manchester, Liverpool and Salford and the University of Manchester Institute of Science and Technology. The programme consists of 20 projects in environmental forces, fluid mechanics, structures and materials, economics and life sciences.

The research has been developed over the past year in discussion between the SRC's director of marine technology, Mr A. M. Adye and advisers from universities, government and industry.

The programme will cover:

- Environmental forces: Five projects will be carried out at Liverpool and Salford with emphasis on wave loading and particle dynamics.
- Fluid mechanics: Six projects at Liverpool and Manchester will concentrate on coastal and offshore problems.
- Structures and materials: Five projects at Liverpool, Manchester, UMIST and Salford will be concerned with welded structures, corrosion monitoring and concrete materials.
- Economics: Two projects on project appraisal and management at Manchester and UMIST.
- Life sciences: Two projects at Salford will be concerned with carbon dioxide detection in diving operations and gas purification methods.

Old teacher courses for new attacked

by Owen Surridge

Many old courses for intending teachers are being falsely reworked to make them appear new and progressive, according to Mr Peter Chambers, vice-principal of Bradford College.

Speaking at a meeting of the Society for Research into Higher Education in London on Saturday, he said: "Present practice of professional studies is still diverse and incoherent. There is a gap between aspiration and reality. Articulate and adventurous claims for integrated courses' professional relevance, higher status, knowledge, coherence, professional consciousness and practical exemplification of learning skills lead one to expect a whole range of new directions in professional studies. In fact, with the exception of perhaps a few, the syllabuses reveal a much less innovative approach."

Most were merely rudimentary. Experiments and the literature revealed deep and disconcerting divisions between ideologies and what was meant by good teaching. A review of professional courses revealed much uniformity and mediocrity. Of the few experiments the most rewarding were developed by colleges which were committed to performance-based models and their effects on learning.

Professor Paul Hirst, education professor at Cambridge University, said it was time to stop theorizing about teacher training and get on with the job. To train a professional all that was needed was a job description of what was required to do. Then it was a matter of equipping the student, just like training a doctor, with the appropriate knowledge and skills. They must include an understanding of the situation in which they were working, and make them able to take decisions based on professional judgement.

Recommending a change to four-year training programmes he said two years should be devoted to main studies, including some appropriate psychology, philosophy and sociology and two years devoted to detailed professional study. To run these courses he wanted to see a new expert, a master of professional studies, with his roots in the schools and knowledge that was relevant to the teaching of one subject.

"We want not a philosopher nipped or a sociologist nipped, but a master of all aspects of the teaching of any mathematics."

Robotics goes commercial at polytechnic

by David Jobbins

A new teaching company scheme to develop commercial products involving robotics is to be based at Leicester Polytechnic. It is the only teaching company operation to concentrate on research and development of new product lines. The Science Research Council and the Department of Trade and Industry are funding the £110,000 project.

The polytechnic will work in close collaboration with a Leicester firm, Rank Taylor Hobson, which employs 800 people and exports 80 per cent of its production. It is one of Britain's most successful high-technology companies.

Six new research assistants are expected to be appointed to the project. A primary task will be to identify the precise areas of the market where the expertise of company and polytechnic could lead to viable products. It will concentrate on microprocessor-controlled manipulators with some degree of in-built quality control, handling between work stations, and precision measuring after manufacture.

The most likely applications for products in the motor car and domestic appliance industries. At any rate the work will be related to manufacturing rather than processing industry, although there might be spin-offs for processing industries such as textiles in the long term.

The leader of the polytechnic's team is Dr Ken Stout, reader in precision engineering in the faculty of technology and construction. He commented: "The field of robotics is clearly the highest technological importance and the future of the British economy must depend to a considerable degree on high technology innovation, of which this is an example."

Knights of unemployed round table

by Ngalo Crequer

King Arthur, or at least the books written about him, will provide a job for three unemployed young people, under the auspices of Professor Cedric Pickford in the French department and Dr Rex Lee in the German department, the university is producing a computerized bibliography of literature about the King.

The work is specially fitting as the coat of arms of Kingston upon Hull—three gold crowns on a blue shield—was the arms normally attributed to King Edward I, who was enthusiastically interested in the project, which will provide a year's work for



Frank Muir, rector of St Andrews University, after receiving an honorary degree at a graduation ceremony last Wednesday. With him are Mr Peter Bainbridge, president of the students' representative council and Allen Chalmers, rector's assessor on the university court.

Tories united against 'political' schools

by Peter David

The Conservative Party has set its face against the major reforms of school examinations proposed by the Schools Council. Mr Norman St John Stevas, the party's education spokesman, told last week's Brighton conference that under a Tory Government O and A levels would remain intact, and the Certificate of Secondary Education would be maintained and improved.

Mr St John Stevas was given a standing ovation for his speech, during which he rebuffed Mr Williams' accusation at the Labour Party conference that Tory education policy was confused and divided. "Poor, blundering Shirley" would never succeed in driving a wedge between him and Rhodes Boyson.

Pledging to repeal the 1976 Education Act, reorganise unsuccessful full comprehensive schools and bring back grant schools through an assisted places scheme, Mr St John Stevas said the purpose of schools was to promote educational, not political or sociological values.

In a debate devoted to the question of comprehensive schools, the only explicit reference to higher

education came from Professor Max Beloff, principal of the Independent University College at Buckingham. He told delegates that a Tory Government should abolish the Schools Council within the first week of power.

He added: "We must stop the polytechnics doing what is not their job, teaching social agitation, and get them back to the job of preparing people for industry and commerce." If the Council for National Academic Awards was unhappy about that, it could be dissolved too. The only crack in the conference's carefully-constructed facade of unanimity came from Mr Eddie Longworth, chairman of the Federation of Conservative Students. He warned delegates that by insisting on backward-looking policies the Tories would become known as the party of the past.

He wanted to know why the party had not mentioned the thousands of unemployed teachers, overseas classes at school or the problems of using the last year of school for non-academic pupils.

Earlier, Mr Longworth was the victim of bitter personal criticism in a fringe meeting organized by the Monday Club to debate the role of the FCS in universities and polytechnics. Mr Nicholas Winter, MP for Macclesfield, said he could not believe the federalist leadership truly represented Conservative students.

Condemning the "trendy, pseudo-socialist" approach of the FCS, Mr Winter urged an end to compulsory membership of student unions and that too many FCS leaders had "let their snouts in the publicly-funded trough of student unions".

He said that the FCS supported the legalization of cannabis, abortion on demand, squatting and the closure of shops. He had also opposed the party's immigration policies. These policies were against the general philosophy of Conservatism and frightened many young people away from joining their Conservative associations at university.

Mr Winter claimed that the climate of intellectual opinion in universities had never been better suited to the Conservatives, but FCS, instead of advancing the cause of the party, was obsessed with the National Union of Students. The argument that Conservatism should establish its influence in the "irrelevant" NUS was nonsense; "Appeasement has never been the route to winning power, influence or even war."

Londoners take up computers as their hobby

A club for people who look off to a flying start at North London Polytechnic.

Nearly 400—ranging from school children to students, teachers, housewives, policemen and businessmen—turned up for the inaugural meeting of the North London Hobby Computer Club.

The plan is to divide the members up into six interest groups: The Homebrew group will concentrate on do-it-yourself computer building; the User group is for people with an interest in particular types of machine; the Software group will follow courses in various computer languages while the Novice section will follow more basic courses.

Members will have access to PNL's computers and expert staff, as well as other resources including the library.

Edinburgh plugs in research service

A new computing scheme which will provide a simple, easily operated research service for a wide variety of disciplines, has been started at Edinburgh University.

The system, known as Edinburg Regional Computing Centre, has almost 300 video and simultaneous terminals and can simultaneously handle input from more than 100 users. It will provide a computing service for students and researchers at Edinburgh University and also for research council centres including local agricultural and medical units.

Merger will break church links

John O'Leary

A joint committee from the University of East Anglia and Keswick College of Education, Norwich, has recommended that a merger of the two institutions should go ahead in September, 1980. Its final report is expected to be endorsed at meetings of the respective governing bodies next month.

The recommendations are aimed at the college, situated some miles from the university plain, to form a new school of education with the university's other faculties of studies. The initial intake will be 486 students, including higher degree courses and teachers on in-service training.

The merger would see the end of the college's association with the Church of England, which dates back to its foundation in 1839. By terms of its charter UEA is a secular institution. The Keswick governors have decided to continue for this by setting up a charitable trust independent of the college which will pursue some of the Christian ideals traditional in the college.

The trust will be financed from

the sale of the college premises to the university and used to further the provision of Christian education both through the training of teachers and also on a broader basis of instruction in faith and education. An indication of the purchase price of the site is yet available since a report from the district valuer is still to be received and passed on to the Department of Education and Science and the University Grants Committee.

The joint committee, which was set up last year to study the feasibility and desirability of a merger, recognizes that a number of points remain for negotiation, particularly on timing. A provisional timetable allows for discussions with the DES and UGC before the end of the year, culminating in final approval by next Easter. A joint committee would then advise on academic posts and detailed planning would take place on the use of the college site in time for formal incorporation by September 1980.

All initial vacancies in the new school would be notified first to existing college staff who would be offered the posts wherever possible. The only exceptions to this policy would be for chairs and for posts in the Centre for Applied

Research in Education. College staff will be allowed to remain in on-site accommodation where appropriate.

The number of teacher training places set by the DES for Keswick Hall in 1981 was 450 but this figure may be varied by agreement with the UGC after the merger takes place. Initially, 120 students would be expected to join the Postgraduate Certificate in Education course, a further 230 would study for a four-year BEd, with the remainder taking in-service or higher degree courses.

Agreement had previously been reached for the university to validate Keswick Hall's BEd degree, although the PGCE remained under the auspices of Cambridge Institute of Education. However, the joint committee says in its report that it believes the merger would have positive benefits for education in East Anglia as a whole and particularly for staff and students in the two institutions.

Mrs Williams, Secretary of State for Education, in her reorganization of teacher training last year cut the number of education places at Keswick from 622 to 400 and supported the merger proposals.

Poly students still choose industry and commerce

by David Jobbins

Polytechnic students are continuing to choose industry and commerce rather than the public service for their first jobs, according to the latest figures. A survey published by the Committee of Directors of Polytechnics, also hears out the vocational bias of the polytechnics. In 1977, the degree output from polytechnics in England and Wales rose by 16 per cent over 1976. In 1977, 13,878 students on full time and sandwich courses gained first degrees—and a further 3,344 gained Higher National Diplomas.

The figures for graduates rose by 9 per cent for men and 31 per cent for women. The high figure for women is attributable to the rapid growth in the output of education graduates—from 528 in 1976 to 1,100 last year, largely due to the mergers between polytechnics and colleges of education.

The survey, the second of a series developed by a polytechnic careers advisers' working party, shows that 71 per cent of science graduates and 84 per cent from engineering degree courses whose job destination was known chose industry and commerce for their first job. Half

1977's HND holders in biology went into the private sector compared with a third in 1976.

More than two-thirds of the graduates and nearly all the HND output qualified in subject areas which were clearly of a vocational nature. The largest number for all those going directly into employment had business studies qualifications. The 639 graduates and 478 HND holders represented two-thirds of all those qualifying in business studies where the job destinations were known.

The proportions were even higher for graduates in some other areas such as mechanical and electrical engineering (69 per cent), mathematics (71 per cent), and pharmacy (96 per cent).

The survey shows a continuing decline in university-validated courses at polytechnics, with 55 per cent of polytechnic graduates having followed CNAAs courses. *Polytechnic First Degree and HND Statistics 1977—Some Details of First Destination and Employment: Statistical Supplement, Committee of Directors of Polytechnics, 309, Regent Street, London W1R 7PE, £3.50.*

Conflict over smallpox staff

by Robin McKie
Science Correspondent

Staff at Birmingham University are slated to return to work at the end of the medical school, one of the recent smallpox outbreaks, despite advice from trade unions to stay away.

The union unions representing staff there, including the Association of University Teachers, the National and Local Government Officers Association, and the Association of Scientific, Technical and Administrative Staffs, have stated that they could not advise members to return to the block. A statement on these lines was issued last week after the unions had met safety and health specialists involved in the Birmingham outbreak.

They added that they will maintain this approach until the publication of the report of the Shunter inquiry which is investigating the outbreak. Only when the unions had time to consider the report will they consider advising members to return to work, they stated.

This decision was made last week because of dissatisfaction with answers in their questions on fumigation procedures and blood tests on staff members. The specialists at the meeting said many of these results were confidential at present.

As a result, the unions agreed to advise their members to remain until the Shunter report had been published, probably in December, and they had studied it in detail.

A university spokesman said that staff at the east wing had now returned, apart from three members of ASTMS. However an ASTMS official said eight members who were required to operate essential services in the building had refused while their other eight members had refused. An AUT official said that despite their refusal, many of their members had returned to work.

New base for ethnic unit

The Social Science Research Council's ethnic relations research unit is to move from Bristol University to Aston University under a new director, John Rex currently professor of sociology at Warwick University. It has been offered a new base at Aston.

The ethnic relations unit was set up by the SSRC in 1970. One of its main functions was to coordinate the work of the council, its research concentrated on the housing problems of black people and the operation of ethnic identity structures.

A confidential review by the council last year raised criticisms of the unit's management and work. It was particularly concerned about its failure to make a big research council centres, including the ethnic director, and the absence of Professor Banton, who directed

Union calls for power shift

by Peter David

A document calling for fundamental changes in the internal balance of power in polytechnics and public sector colleges has been prepared by the National Association of Teachers in Further and Higher Education.

It calls for a revision of the Department of Education guidelines on college government, a big reduction in local authority representation on governing bodies and the removal of all non-elected members of academic boards except for principals and directors.

The NATFHE document is the result of two years of work. It incorporates resolutions passed by the association's conference this year and in 1976, as well as changes arising from the Taylor Report on school government and the Oakes Report.

But the document will not become official NATFHE policy until it has been re-examined by a group of executive members due to meet next month.

A major area of contention within the association is the call to remove all non-elected members of academic boards. At present most academic boards are controlled by large numbers of ex-officio members who owe their places to their roles as heads of department or members of the polytechnic directorate.

These arrangements confer considerable power on principals and directors, and will be resisted by some of them. At the last NATFHE conference members voted after an emotive debate to remove ex-officio posts on the academic board.

Other controversial suggestions in the document are that local authorities lose their majority membership and special status on governing bodies. NATFHE envisages 25 per cent of governors being local government representatives, with at least an equal number of elected members of the teaching staff.



A contemporary engraving of the eighteenth-century scientist Joseph Black, who was professor of medicine and chemistry at Edinburgh University. A symposium to mark the 250th anniversary of his birth is to be held in the Royal Scottish Museum, Chambers Street, Edinburgh, on Saturday, November 4, and will include lectures and discussions on the work of Black, who was noted for his discovery of fixed air (carbon dioxide) and also of latent and specific heats.

Decision-makers 'need more international co-operation'

by Patricia Santinelli

At a time of financial stringency, national decision-makers needed a European or international frame of reference more than ever before, Mr George Kahn-Ackermann, Secretary General of the Council of Europe, said in London this week. Speaking at Internavus '78 on the problems facing education today, Mr Kahn-Ackermann said: "The successes and failures of other countries can help them to find solutions to their own problems and improve their education systems."

Discussing ways in which this could be achieved, more effectively, he said the council intended to review exchange programmes at all levels of education.

"We should create centres in all countries where teachers can meet and exchange their experience. After 50 years of cooperation in Europe, textbooks reflect relatively little of this process and teachers know little about educational development in neighbouring countries."

He said it was time to establish a programme which would step up not only the "twining" of cities but interchanges of teachers and universities throughout Europe to create greater cooperation and understanding in individual countries. Mr Kahn-Ackermann pointed out that education had now become a matter of serious public debate throughout the 22 member states of the council, all of which faced problems of an essentially Western European nature.

The relevance of school education was being challenged and people were generally questioning whether they were getting value for money out of the education system which general unemployment faced school-leavers, graduates and teachers. He regretted that there had been a drop in the learning of foreign languages throughout Europe. Young Europeans should learn at least two languages as an essential preparation for life on their continent, the world and society.

London's peace and conflict loss is Lancaster's gain

The Richardson Institute for Conflict and Peace Research, currently based in London, will this month become part of the department of politics at Lancaster University. The institute, which is jointly supported by the university and the Joseph Rowntree Charitable Trust, will carry out research, supervise postgraduate research and offer undergraduate courses in conflict studies.

Dr Michael Nicholson will continue as director of the institute, and he will be joined by Dr Paul Smoker, reader in peace and conflict studies in the Lancaster politics department. Lancaster has been conducting peace and conflict research for the past 13 years.

Dr Nicholson said: "We hope that the Institute with the Conflict Research Society will continue to develop links with other institutions and research workers throughout the world. In particular we hope that some form of co-operation will be possible with the peace studies programme at Bradford University."

Mr Gordon Hands, head of the politics department at Lancaster, said the institute would complement work being carried out there.

Longest serving secretary retires

Mr Charles H. Stewart, secretary to the University of Edinburgh, has retired after 31 years—more than any university registrar or secretary now in office in the UK.

The university's acting principal, Professor Derrick Saul, said he had made an unrivalled contribution to the university through a period of Edinburgh's expansion and transformation. Mr Stewart is to write a history of the university from 1890 to the present day during his retirement.

Food for thought

Reading University has announced the appointment of a second professor of food technology. He is Dr Norman Blakebrough, at present senior lecturer in chemical engineering at Birmingham University. The university has appointed Dr John McInerney, senior lecturer in agricultural economics at Manchester University, as the second professor in the department of agricultural economics. He will take up office next year.

Butler for steward

The Council of the Senate of the University of Cambridge has put forward the name of Lord Butler of Saffron Walden, formerly Master of Trinity Hall, for appointment to the ancient office of Deputy Tiler Steward, subject to the approval of the university. Lord Selwyn Lloyd held the office from 1971 until his death in May.

Overseas News

Growing concern over new contracts

from Guy Neave

PARIS
The start of the university term sees growing apprehension among junior lecturers and part-time staff over the recently published changes in conditions of service.

Suspicion is all the more acute for the fact that the final version of the ministerial decree, published at the end of last month, differs substantially from the proposals revealed to representatives of teachers' associations in higher education by the Minister of Higher Education, Mme Alice Saunier-Seïte.

The new decree sets out the conditions of employment for three groups in universities: for researchers, for people whose main job lies outside the teaching profession and tutorial assistants.

In future, they will be required to undertake no more than 75 hours a year small group work or 150 hours a year practical supervision. Particularly tough is the fact that they will only be able to remain in post for five years or to the age of 30 which ever is sooner.

Considerable changes have also been introduced in the employment of assistants in the fields of social sciences, law and humanities. In future only those preparing a PhD (Doctorat) or a Doctorat Cycle or Doctorat D'Etat or undertaking research in addition to their teaching, will be employed. It is expected however, they will teach no more than 150 hours per year tutorials or 300 hours practical work.

Selection and recruitment for these posts will be in the hands of a committee of professors and readers (Maitre de Conference) and measure taken by many to strengthen the mobility in their search for the discomfort of those of low degree.

Hardest hit of all will be junior lecturers. Though the arrangements have yet to be finalized, they seem very much to be a part of things yet to come. Those seeking to have their posts renewed will, naturally require the backing of the administrative head of their department. This is usual. What is not is that in future the decision will ultimately be taken by the head of the local educational district who is the official representative of the central administration in the region.

Increasingly, it appears that Ministry control over higher education is being tightened by referring crucial decisions on appointments in higher education to administrative officials outside the university. This, more than anything else, suggests that the long term strategy of the



Mme Saunier-Seïte

Ministry of Higher Education is to nibble away at the foundations of the Loi d'Orientation of 1968. This law, introduced by Edgar Faure, guarantees the autonomy of universities.

Suspensions about the Ministry's ultimate intentions are supported by a recent statement made by a member of the Cabinet and reported in last week's *Canard Enchaîné*, France's weekly satirical paper. "Once we have dealt with the junior lecturers," this worthy is quoted as saying, "we'll take care of the rest. And then we'll see what remains of Edgar Faure's buffooneries."

This is not all, however. Junior lecturers in the social sciences and arts field will be asked to take on a not inconsiderable work load up to 375 hours a year small group tutorial or 750 hours a year practical.

Already last month the five major unions in higher education called for a two-day stoppage in protest. Particular worry is the inclusion of a clause in the decree stating that assistants and junior lecturers should be employed only "if the interests of the service demand it."

The ambiguity of this phrase is contained in the fact that heads of department are not necessarily those who decide what are "the interests of the service". This is an administrative function in France and thus determined by central government.

Much depends on how the Minister will seek to implement this usage. Yet many academics see it as a subtle undermining of the standing of the teaching profession. The creation of a pool of lecturers without tenure, without guaranteed long-term employment is seen as a very real threat to the interests of the academic profession.

Standstill on campus figures

from John Kirkaldy

SYDNEY
The virtual standstill in the number of students enrolling at Australian universities is confirmed in recently released figures from the Bureau of Statistics.

On April 30 there were 160,035 students in the country's 19 universities. On the corresponding day in 1977 the figure was 158,411. A major development is the drop in full-time students: in 1977 there were 102,901, compared with 101,235 this year.

Contrasting with this, is an increase in both part-time and external students. These went up by 3 per cent and 20 per cent respectively.

Full-time students (101,235) comprised 63.2 per cent of all students enrolled in 1978, part-time internal students (47,191) 29.5 per cent and external students (11,609) 7.3 per cent. The equivalent percentages in 1977 were 65 per cent, 29 per cent and 6.1 per cent respectively.

The bureau said that 128,874 students were enrolled in first degree courses, compared with 127,358 in 1977. The extent to which student intake has levelled-off after a period of dramatic increases can be seen in comparing figures taken over the past decade. In 1968 there were 101,537 students, while in 1973 this figure had reached 133,126.

A comparison shows that in the past 10 years the number of women at universities has risen, but that they are still in a minority. In 1968 there were 72,470 men and 29,067 women (71.4: 28.6 per cent); in 1973 there were 89,218 men and 44,908 women (66.3: 33.7 per cent); and in 1978 there were 96,218 men and 63,817 women (60.1: 39.9 per cent).

Although nearly 40 per cent of students at universities are women, the overwhelming percentage of teaching staff is male. Only 14 per cent of teaching staff are women and most of these are in the lowest ranks. Sixty-five per cent of women in academic jobs are on temporary appointments, compared to only 19 per cent of the men. (A survey in 1976 showed that only 1.8 per cent of the country's professors were women.)

"The women just don't get the senior jobs," said Miss Shirley Sampson, a lecturer in education at Melbourne's Monash University. "The universities give preference to men. Many of the young women are more brilliant than the young men in universities. They have to be to get jobs in the first place."

Australian university students are also coming from an older age group. In 1968, 38.1 per cent of students were in the 17 to 20 age bracket, compared to 35.8 per cent in 1973 and 30.7 per cent in 1978. By contrast, students over 31 in 1968 were 12.4 per cent of the total enrolment compared to 13.4 per cent in 1973 and 20.7 per cent in 1978.

A similar, if less dramatic, pattern is to be found in both the 21 to 25 and 26 to 30 age groups. A comparison in the first group shows: 1968 (38.1 per cent), 1973 (37.4 per cent) and 1978 (33.8 per cent). In the second group the change has been: 1968 (11.4 per cent), 1973 (13.5 per cent) and 1978 (14.9 per cent).

It seems likely that Australia's student numbers will soon reach a position of no growth and may even decline. This trend was confirmed in the recent volume two of the Tertiary Education (TCE) report for the 1978-81 triennium. This trend has been encouraged by a relatively high unemployment (5.9 per cent of the workforce in July).

Critics of these projections have remarked that given recent trends and the general economic development a great many economic and social factors come into play here, just as in Britain, so that this high rate of university enrolment is by no means guaranteed. It might have been more prudent to offer, as the British Higher Education in the 1990s document does, variants on several different assumptions.

The two German variants reflect different assumptions in the pattern of courses offered, as in the Federal Republic, yielding

Chaos threat as unions back strike by staff

from Uli Schmerzer

ROME
Striking academic staff, backed by the country's three most powerful unions, threatened this month to cause havoc at Italian universities.

Junior staff, the so-called "unstabiles" (not permanently employed) who make up the bulk of teaching staff, voted to walk out in the first of a series of strikes to protest against unjust treatment.

Italy's three main unions immediately hurled their weight behind the strike by calling on non-teaching staff to stage walkouts in support of their own demands for higher wages.

The decision of the teachers and the unions came simultaneously with the announcement by the Senate's education commission that it had completed its year-long study of the University Reform Bill proposals and passed them on to Parliament.

The Bill has left the "unstabiles" in a precarious position. It has failed to secure firm appointments or a fairer wage structure.

After 10 years in limbo the long overdue Bill has already become a target for irate criticism after its extensive dilution in months of commission debates.

The principal reason for the diluting process has been fear among the Christian Democrats and the Communists that the Bill which affects two million higher education students could become a positive political tool for one of them—and so upset the delicate balance of power between them.

Rather than run any risk both parties insisted on amendments to the original proposals that have apparently left the Bill quite ineffective.

Even the president of the commission, Senator Giovanni Spadolini, admitted: "We don't pretend to have worked out a perfect project, nor a definite one. The issue of university reform is a great national question which has been aggravated by lack of comprehension."

The statement was a trifle ironic after twenty years of efforts to reform the antiquated state-run higher education machinery which is still clinging to its pre-war structure. For the past decade a spate of reform proposals have virtually died during pregnancy.

The current proposal (which Parliament will begin to debate on November 1) seems destined for the same fate. Even as it reached Parliament, it was being attacked by other university rectors at their week-long conference in Madrid last week. It was also being attacked by the universities and accused it of undermining the universities on a shoestring budget.

The President of the conference, the Rector of Salamanca University, claimed that the universities could give no guarantee of physically surviving the present academic year on the meagre outlay assigned to them by the Government.

Basic costs of maintenance and personnel shot up by 40 per cent last year, whereas the state university subsidies had been increased by a mere 10 per cent. The rectors' preoccupation stemmed from the fear that this 10 per cent increase would be maintained throughout this year. The present funds available to higher education, they insisted, were completely unrelated to the record student intake of previous years.

liament academics, labour unions and opposition parties denounced it as utterly inadequate. We will not accept this proposal which is only a reform in name, said Luciano, the education specialist of the Italian Socialist Party (PSI) warned. He added: "The reform should at least contain some essential content to merit its name."

The negative reaction to the commission's reform proposals prompted a number of academic and non-academic staff at the Rome University to take over several faculties in protest.

The all-party commission had demanded a return to numerous students whose high school certificates are considered insufficient for their selected university courses.

It also tried to solve the aspirations of the "unstabiles" to achieve permanent posts by forcing them to submit to a nationwide annual "competition" for vacant posts.

The posts would be shared by academic boards whose composition has become one of the principal stumbling blocks of the proposal.

The quota for each faculty is to be linked with the professional needs of the economy—an idea which was at once attacked by students who considered this would create an Orwellian campus society with big brother choosing the course.

The decision of quotas and the choice of courses was to be left to a 48-member special commission comprised of parliamentarians, higher education specialists and trade union representatives.

The faculty system was to be replaced by a British-style department system and a two-year diploma was to be added to the four-year laurea (bachelor degree) which is the traditional course for Italian students.

However, the laurea will continue to elevate its holder automatically to a higher income bracket. The abolition of the laurea value of the laurea has often been advocated by academics as a sure means to reduce congestion at Italian universities.

Despite the favourable reaction to the initial proposals it seems unlikely now that many of them will (if ever) pass through the houses in their original form.

The amended and rephrased Bill proposal now before parliament has been seen in full but those who worked on it claim it has lost considerable punch and effectiveness. The result is yet to emerge.

Shaping the future of the colleges

John O'Leary meets John Barnett, principal of Ripon and York

Leading the colleges of higher education into the unknown territory of the 1980s must be among the most daunting tasks of today's education scene. Still evolving after a decade of cuts and more, the colleges and institutes face the challenge of carving a niche in the system before traditional universities and polytechnics take over. The shrink, push, pull of a new wave of change brings a new wave of change. As the least known and least understood sector they are acutely aware of the threat the future may hold for them.

The man charged with providing the colleges with a secure future is Mr Barnett, principal of the College of Ripon and York St John. A former headmaster and later principal of Culham College of Education, Mr Barnett has been in the post since 1972.

He would meet in a pre-arranged meeting with the Council of Principals of the Church of England colleges of education. The church colleges, including his own, form an important part of the Stanning Conference of Principals and Directors of Colleges and Institutes in Higher Education, of which Mr Barnett is the first chairman.

The standing conference is still in its infancy, having been formally established last December after several months on an ad hoc basis, but already it has served notice of its potential. With the present membership standing at 71 institutions of widely varying character, the conference represents a significant proportion of higher education in the country.

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they feel they deserve in the shaping of higher education. Such a stance is typical of Mr Barnett's pragmatic attitude both at a national and local level. It is a conscious decision not to put any obstacles in the way of any possible reorganisation of representation for the maintenance of higher education. The principals see their role as no less important than that of the polytechnic directors and are reluctant to play second fiddle at such a crucial time for the education world.

The result of this policy at present is a considerable workload for Mr Barnett, which inevitably takes him away from York more regularly than he would like. That he can meet the demands of the chairmanship is a mark of the success he has achieved at York. For while many principals are anxiously scanning recruitment figures and seeking approval for diversified degrees to replace lost teacher training courses, Mr Barnett is able to survey a thriving institution which, he says, is geared to running without difficulty in his absence.

Part of the reason is that the college was ahead of its time in undergoing the fundamental changes which now face many other similar institutions. The transition suffered in 1972 from the loss of the teacher training places, controversy over degree validation, the merging process, the establishment of diversified courses and the problems of split sites—are a microcosm of the overall challenges facing the sector.

And it is not only the flexibility of the college which has enabled it to survive. Mr Barnett and his colleagues have produced a successful answer so far.

The colleges actually merged in 1975 but two years of careful planning preceded the event, making the transition a relatively smooth one. The question of university status for the new institution's degrees was much less so, but finally provided an example of the adaptability which is a keynote in the college's development.

Longer discussions with York University, which is now a constituent of the college, have led to a little tension between the college who prefer to base itself on one site in York, which is plainly the dominant partner, but the college's survival depends on a realistic hope for the foreseeable future.

Instead, the college will continue to make the best of existing circumstances. Since the merger it has made a major investment in the teaching of design and technology, taking in teachers and equipment as well as BEd students;

poned their decision on specialisation until the end of their first year. Before then a student need not belong to any particular department and must follow four courses taken from any two subject areas, as well as undertaking a period of off-campus work.

A new unit structure, approved by the university, is to be introduced next year with the intention of providing still more flexibility and requiring the first year student to work in at least three subject areas. The nine departments offer 19 areas of study for undergraduate students, ranging from the physical sciences to human movement studies, film and television.

The approach is obviously attractive to intending students, who welcome the opportunity to experiment with subjects not available in many schools before reaching a decision about their academic direction. Research being carried out by the Department of Education and Science shows the open system to be the most common reason for degree students to come to the college. Its popularity is evident in every course and applications were closed in all but the current "problem areas" for recruitment.

The character of the college has changed dramatically since the merger. From two institutions catering for 1,539 students exclusively in teacher training, the college now caters for almost half the 1,623 students are on diversified courses. At the same time problems of limited academic expertise have been mitigated by a rapid turnover of staff; retirements have meant that almost a third of the present staff have arrived (mostly from universities) since 1975.

There is general recognition that not only was the merger inevitable but the product is superior to the sum of the parts. Split site operation has brought problems, particularly with a shortage of finance for the college, but the merger has led to a little tension between the college who prefer to base itself on one site in York, which is plainly the dominant partner, but the college's survival depends on a realistic hope for the foreseeable future.

Instead, the college will continue to make the best of existing circumstances. Since the merger it has made a major investment in the teaching of design and technology, taking in teachers and equipment as well as BEd students;

taken over a school of occupational therapy with the intention of expanding the number of places held by the particular department and qualifications offered; built up an active television and audio-visual department; made room available for numerous outside activities by teachers and other members of the community; and appointed one of the few full-time college career officers whose service existed two years ago.

Mr Barnett is justifiably proud of York's record, which is one of the main success stories of the sector, but he strikes a note of caution in surveying the prospects for the future. Despite the college's present popularity, which shows no signs of waning, he does not believe that honeymoon can last when the number of school leavers begins to dwindle in the mid-1980s. Students who would now join the college without academic qualifications will find university places more easily obtainable and the college would have to rely on its reputation for good teaching in small groups to compete in mainstream courses.

But Mr Barnett sees a definite role for York and its companion colleges along the lines of the Modern B option in the DES discussion paper "Higher Education into the 1990s". Continuing education, part-time degrees and a general willingness to explore the possibilities for courses aimed at mature students are seen as the keys to survival and success, he believes.

As a test of the potential, the college advertised in the local press for students to join a pilot course for part-time students run during the day, expecting responses from perhaps a dozen households. Over 80 replied, leaving the staff amazed at the untapped market which, through traditional links with the local community via the schools in particular, they are well equipped to exploit.

The same applies in other colleges. Mr Barnett believes, although the wide range of institutions makes generalization dangerous, the common factor is the need to provide an alternative to the type of education being offered in the universities, rather than trying to compete with them. While some small institutions will be able to survive because of their reputation for excellence in specific areas, he sees diversification as inevitable and requiring a college of at least 1,200 students to be attempted successfully.

With several members of the Standing Conference heading much smaller institutions it is not surprising that Mr Barnett admits to being anxious about the future of some colleges. He draws an analogy with village schools—universally admired but nevertheless threatened because of their inability to provide the range of options considered necessary for modern education.

Mr Barnett's view of the future both for York and Ripon St John and the other members of the standing conference is brutally simple: "We must be innovative and not interested merely in survival. Consciously though I am of my responsibilities in that respect with hundreds of jobs bound up in the college, we will not deserve to survive unless we can be innovative." The signs are that York is capable of meeting that challenge, but the question remains of how many of the other colleges will be able to follow suit.



John Barnett: providing the lead.

Leader. Page 35

German ministers revise student number plans

by Günther Kloss

BONN
The West German Kultusminister-Konferenz (Standing Conference of the Land Education Ministers) has published revised planning figures for student numbers in the Federal Republic up to 1995.

According to the basic projection, total numbers of full-time students at universities, comprehensive universities, advanced vocational colleges and colleges of education will reach a minimum of 1,360,500 by 1988 (1977/78: 1,140,000) and will drop to 1,044,800 by 1995.

The German predictions are bedevilled by the same sort of uncertainties as the British projections contained in the recent *Higher Education into the 1990s* document.

Both are based on known demographic trends. Both assume the same percentage of grammar school leavers qualified for university entry, which in Germany falls in the 19 to under 21 age group.

They both take into account the rising percentage of pupils receiving secondary education beyond the minimum school leaving age and qualifying by a variety of routes for university entry. This percentage is expected to rise to an average of 27 per cent throughout the Federal Republic, yielding

280,400 Abiturienten by 1983. Their numbers then fall by 40 per cent to 169,000 by 1995 because of the drop in the birth rate.

Similarly, both variants rely on a previously published projection which predicts an increase in the participation rate—that is, in the number of entrants expressed as a percentage of qualified leavers (in Germany does not use the term *university entrance examination*) from the present approximate 60 per cent to as much as 90 per cent by 1995.

This would, in fact, mean a return to the traditional pattern prevalent until the mid-1970s, when almost all qualified school leavers were willing to embark on higher education courses.

Critics of these projections have remarked that given recent trends and the general economic development a great many economic and social factors come into play here, just as in Britain, so that this high rate of university entrance is by no means guaranteed. It might have been more prudent to offer, as the British Higher Education in the 1990s document does, variants on several different assumptions.

Rectors attack Government over 'meagre' budgets

from James Connell

BILBAO
Spanish university rectors at their week-long conference in Madrid last week lashed out at the administration and accused it of undermining the universities on a shoestring budget. The President of the conference, the Rector of Salamanca University, claimed that the universities could give no guarantee of physically surviving the present academic year on the meagre outlay assigned to them by the Government.

Basic costs of maintenance and personnel shot up by 40 per cent last year, whereas the state university subsidies had been increased by a mere 10 per cent. The rectors' preoccupation stemmed from the fear that this 10 per cent increase would be maintained throughout this year. The present funds available to higher education, they insisted, were completely unrelated to the record student intake of previous years.

The actual financing runs to £162 million covering a total enrolment of 550,000 students. In comparing

their subsidies with those allotted to other European universities, the university of Bonn was cited as receiving £107 million to cover a student roll of 26,000.

The dons appealed to the political parties to adopt a more serious attitude towards the universities as an essential long term investment. The structure and quality of higher education was being undermined by the lack of adequate funds. It was maintained that research could not be undertaken at a satisfactory level on such precarious finances and the salaries paid to contracted assistant lecturers were described as ludicrous.

It is rumoured that a major economic crash programme similar to last year's Moncloa Pact which dolled out emergency funds to education is about to be negotiated. As the universities were conspicuously passed over in the distribution of government largesse last year, the rectors' case is seen as an attempt to state their case in good time for the next loosening of the state purse strings.

Library group opens doors

The Library Association of South Africa opens its membership to non-white librarians, of whom there are a considerable number employed by public bodies and organisations, will in future have a voice on conditions of service and other matters affecting their profession.

Degree recognised by Russians

COLOMBO
This is the effect of an agreement on the equivalence of documents on education, scientific degrees and ranks, signed in Colombo by Mr. Rashid Nisbano, USSR Ambassador to Sri Lanka, and Dr Stanley Kappagode, Secretary of the Ministry of Higher Education on behalf of the two governments.

Battle to beat the £8m academic book thieves

A lecturer who liked the smell of old books admitted stealing rare volumes worth £23,000 from Oxford's Bodleian Library. The books were later recovered.

An Iranian student was jailed for two years for stealing precious Indian and Iranian manuscripts, valued at £86,000, from Cambridge University. Most were recovered although several had been damaged when they were snipped from books with nail scissors.

Each year books estimated at roughly £8m disappear from libraries throughout Britain. About half is improperly taken from academic libraries as never returned. Dramatic court cases hit the headlines but the wholesale theft of books from libraries is a continuing headache for librarians.

Academic libraries are the worst victims of the book thieves. Public libraries lose about 1 per cent of their stock per year. In academic libraries the figure is believed to be nearer 3 per cent, although no official figures are published.

A survey has shown that books on law, medicine, sociology and—most likely to be stolen—are the most likely to be stolen. It is thought that tomorrow's lawyers, doctors, social workers or priests are coming in increasingly to rely on the necessity of adopting twentieth-century methods of stemming the flow.

Although they would not like to be seen to delight in it, the main beneficiaries are probably makers of detection systems such as 3M. They have seen a sub-

stantial market growth in recent years and expect it to continue. The new generation of equipment is now less prone to noisy and embarrassing false alarms, less vulnerable to librarians and honest users, more reliable than their primitive predecessors—and much more expensive.

The amount of money spent on acquiring books for university and polytechnic libraries has not risen as quickly as book prices. With more students in search of a limited number of books, the pressure is greater, and the temptation to steal becomes less easy to resist.

"Moral standards in regard to libraries seem to have a completely atypical trend," says the sales manager for one of the leading manufacturers of book theft detection systems, Mr Geoffrey Wide. "The person who would not think of pinching a pack of bacon from a supermarket will quite calmly go into a library and take a text book."

And book stealing is by no means confined to impoverished students. One of the first victims of 3M—the system sold by Mr Wide—was a university professor.

With the financial pressure on libraries accentuated by the depredations of the book thieves, librarians are increasingly being asked to come in teams of two to check out books. The explanation is that the text books for these fields are more expensive—a medical text book can now cost £80 or more.

Experts in the theft prevention field also believe that ideology plays a significant part in sociology book thefts. Social studies students seem more likely to question the

concept of ownership of property than others. So the real reason for the continuing upward trend in thefts is not necessarily that people are becoming dishonest. It really reflects the astronomical rise in book prices and the increasing pressures on student finances.

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rarities mainly in academic institutions, has two forms. One is really only suitable for public libraries where the books, once acquired, are not returned when the borrower has finished with them.

In university and polytechnic libraries the system has to be flexible enough to allow students to carry legitimately borrowed books in and out at their will without having to pass through a check each time.

Therefore 3M has devised a more complex system to meet this essential need. A gadget at the check-out desk, which need not be at the library exit, is used to deactivate the trigger when a book is borrowed. Once this has been done, the book can be carried in and out without setting off the detection mechanism.

The system relies on clearly defined entrance and exit arrangements. The entrance gate is designed to lock and prevent anyone slipping through the back of the library. At the exit a gate will lock if anyone tries to leave with a book which has not been desensitized and properly checked out. Not only can the 3M approach be used for hard-back and paperback books, but also to protect audio cassettes and video cartridges.

Valuable old books and manuscripts can also be protected. In the firm's experience it is extremely rare for books to be damaged by a potential thief trying to find the triggering device. The system has been in use around for five years, and most people readily accept it once installation is complete.

There is often an initial brief of suspicion—from librarians as well as students who tend to

resent any form of mechanized surveillance. But the firm's policy of making sure that students are told of the benefits they can expect—like going to the library on the eve of their finals in reasonable certainty that the key book they need will still be on the shelf.

"We try not to give the impression we are putting in a 1984 George Orwell sort of thing, but an unfortunately necessary piece of equipment to prevent the majority of students who are honest being inconvenienced by the minority who are dishonest," Mr Wide says.

Bristol University librarian, Mr Norman Higham, is an enthusiastic convert to electronic surveillance systems. One was installed at Bristol two years ago and he expects that in another four it will have paid for itself.

"It takes away the human element from the exit check," he said. "One benefit is that it removes the appearance of security. Instead of a beady-eyed porter watching and asking to look at books he suspects may have been removed improperly, you have a virtually unsupervised exit. It is less objectionable ethically in terms of the relationship with the users."

He expressed his sadness that a tiny minority of students reject established procedures for ensuring that everyone had a chance to see the book they need and resort to improper borrowing. "The electronic system means we have a much better chance of controlling this situation, and preventing the loss of books through improper borrowing."

David Jobbins

A course in confidence for redundant workers

When Thorn Electronics shut down, Bradford College launched Lift-off, a unique scheme to help the people who had lost their jobs. Maggie Richards reports.

The lives of 2,200 electrical workers in Bradford were shattered earlier this year by the news that their firm, Thorn Consumer Electronics, was to close down.

Employment prospects in Bradford are bleak—particularly for those in unskilled or semi-skilled occupations, who formed a sizeable number of the Thorn workforce—so the closure presented a challenge to, among others, the city's education authorities. A response came from Bradford College, which launched a unique programme aimed at those workers least likely to obtain alternative jobs.

The venture has given college staff new insights into the problems of catering for mature students, and has revealed the inadequacy of the Training Services Division's TOPS courses and preparatory studies to cope with redundancy and re-education on a massive scale.

How the college set about establishing a special programme for the Thorn workers and its subsequent progress are recorded in an interim report just published.

When it became clear that closure at the Thorn plant was inevitable, approaches were made to the management and shop stewards, prompted by Mr Joe Mitchell, the college's coordinating tutor for trade union studies, who felt the institution ought to help in some way to alleviate the plight of the jobless.

From discussions with the trade union convenor at Thorn's, and the company's training officer, the suggestion of a four-week summer school for redundant workers emerged. The purpose of the course would be to familiarize students with the college, to provide diagnostic and counselling services and to identify viable areas for continued studies.

It was recognized that uppermost in the students' minds would be the programme's potential to enhance their job prospects, so that the curriculum had to be developed with this aspect very much in view. But college staff had to be realistic from the start about Bradford's unemployment situation and accept that in many instances the programme would not lead to new employment. Course planning had, therefore, to allow for the twin purposes of enabling students to explore different vocational areas while also being able to examine their own potentialities in a far wider context of long-term unemployment.

A first attempt to interest Thorn workers in the summer school programme, entitled Lift-Off, was a dismal failure. The college staged an exhibition with the emphasis very much on existing provision.

A news-sheet was issued inviting employees to apply for places on the four-week summer school.

By the end of the second week of the exhibition, and following distribution of a second pamphlet, only 20 of the Thorn staff had expressed any interest in attending Lift-Off. College staff realized their mistake. It was not feasible for many of the Thorn workers, with only hazy ideas of alternative job options, to transfer to established further education provision after so short an introductory period. Many of the existing courses were also job-linked, with training forming an integral part of employment.

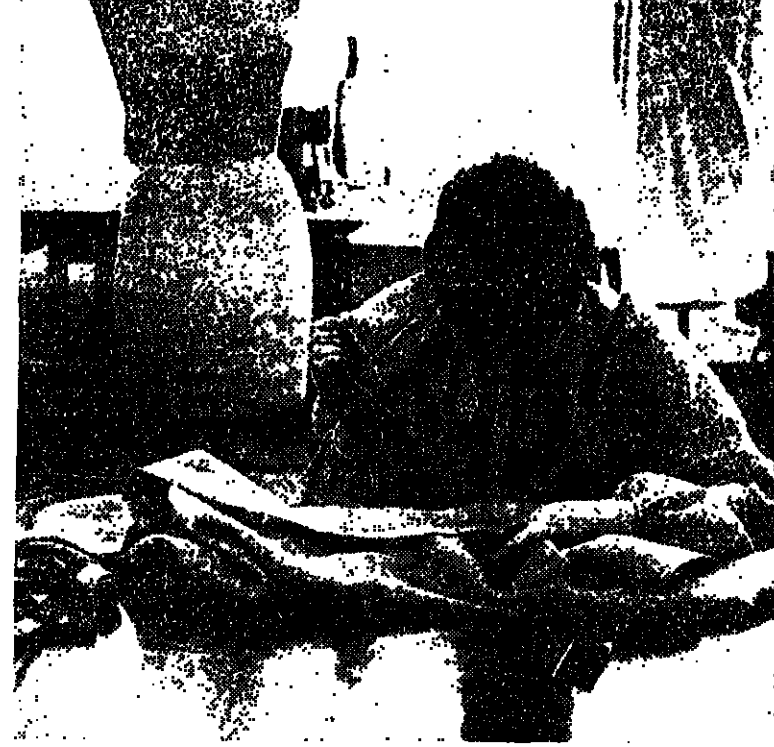
To make employees more aware of the wider opportunities the college had to offer, Thorn's trade union convenor suggested an invitation to all the plant's shop stewards to visit the college and report back to their own members. This move, coupled with visits to the works by college staff, provoked responses from some 560 workers. Each of them was invited to attend the college for an individual interview and enrolment in mid-August.

The programme launch date was carefully designed to coincide with the day on which the Thorn plant would normally have resumed following the summer holiday break. It was also thought prudent to introduce the workers to the college well before the bulk of the student population arrived in September, allowing them to become accustomed to their new surroundings.

In all, 322 students finally registered for Lift-Off. In ethnic terms 42 per cent of British origin, 37 per cent from Asia, and the rest generally from West Indian and European backgrounds. About one-fifth of the students were men; among the women more than 70 per cent had been employed as unskilled or semi-skilled labour. Only 33 students possessed any formal qualifications—the Certificate Secondary Education or GCE O-levels.

Lift-Off offered the students basic education studies in literacy, numeracy, English as a second language where necessary, and a communications workshop which concentrated on spoken English. Students then selected options from a variety of subject areas including: dressmaking, car maintenance, office studies, domestic electrics, sewing, catering, art and photography.

In order to obtain unemployment benefits, the students were only permitted to attend college for two and a half days a week. Two of these days were spent following the basic education studies and subject



The sewing group at Bradford College is continuing

options—one morning a week was reserved for students to experiment with options they had not selected.

In some instances options were purely vocational in content; in others, a broader perspective was adopted—catering, for example, was geared more to the need in times of financial hardship to maintain levels of nutrition on a limited budget.

Several major obstacles loomed when college staff set about designing continuation courses to succeed Lift-Off. By far the biggest problem was presented by the female students whose excessive numbers, low skill levels, and age groupings militated against them in addition, Asians formed a significant proportion of the women students, and were handicapped by severe language difficulties which could not be immediately remedied.

Workers with higher degrees of skill were also a cause for concern. Skills acquired at the Thorn plant had often been intensely specialized, and not easily transferable to other industries. In these instances, vocational education of a broader nature than generally offered by further education was required to improve job prospects.

In mid-September 130 students from Lift-Off registered for the

continuation course; another nine have opted for other further education courses within the college—mostly on a part-time basis. One, with the aid of a discretionary grant, has begun an arts foundation course.

A spin-off from the summer school has been the awakening of interest in adult education classes among some of the Lift-Off students.

The continuation course at present consists of work in the area of basic adult education, combined with presentation of several subjects developed from Lift-Off. Car maintenance has evolved into automobile engineering and welding; catering is now to proceed from basic cookery to City and Guilds level; two groups of students are pursuing office studies which includes typing instruction; the sewing group is continuing.

In one subject area the college staff have encountered opposition—Bradford's local hairdressers' federation expressed alarm that training in this field should be continued. The problem has been resolved by emphasizing that no professional qualification will be awarded.

In exploring alternative avenues for the Lift-Off students, staff automatically looked to TOPS provision. Their hopes were soon dashed:

they found the scheme could not cope with the numbers of workers involved and, more seriously, those most educationally disadvantaged and therefore least likely to obtain considered eligible for places.

Workers whose spoken English was poor were excluded from the scheme, as were those deficient in literacy and numeracy skills. TOPS scheme demanded strong evidence of a serious intention of taking up work in a specified area, while many of the Lift-Off students had no clear idea of alternative directions. TOPS preparatory courses, designed to introduce workers to various skills, could only cope with 16 students a year.

As might be expected in an area of substantial unemployment, demand for TOPS places was found to be high. Thorn workers who succeeded in overcoming all the obstacles of application were subsequently faced with a six month queue for retraining.

Officials of the Training Services Division did carry out interviews at Thorn's shortly after the closure announcement and 40 of the 140 applications for places were accepted. But after investigation, staff at Bradford College have decided not to recommend their students to apply for TOPS places.

One serious shortcoming of the Lift-Off scheme and continuation programme has had to be accepted: whereas TOPS students receive earnings related income during their courses, no such provision can be made for those on the college's own courses.

So far Bradford Metropolitan Council has enthusiastically encouraged the college scheme, providing £50,000 to fund Lift-Off and the continuation programme until next April, and granting discretionary awards where necessary for full-time study.

Some of the original Lift-Off students have found jobs. A mail order firm has recruited one of the Thorn plant and is busily recruiting to meet the Christmas rush. Whether this is a temporary respite for the students has yet to be established.

The college's course coordinator, Ms Jackie Bracey, was one of the staff principally involved in establishing Lift-Off. She feels the course was of value in building the self-confidence of students even though their job ambitions might not have been realized, and that the students themselves had recognized this.

Staff too benefited enormously from the experience. "It has opened up to us the need to re-examine what adult education is all about—that those people who claim adult education is flower arranging and like will have to rethink their views".

"Lift-Off": A summer school for redundant workers from Thorn Consumer Electronics, Preliminary Report, obtainable from Bradford College, Great Horton, Road, Bradford BD7 1AX.

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Douglas Morrison reports on the background to withdrawal of recognition of a Heriot Watt course

How planners fell foul of RTPI

The troubles in Heriot Watt University's department of town and environmental planning began to come into the open with the report of the Royal Town Planning Institute's visiting party in 1976. It objected to these shortcomings in the MSc:

- It lacked an integrated common core.
- Project work was not sufficiently comprehensive and was not clearly defined.
- Wide areas of necessary tuition were omitted.
- There were insufficient problem-solving exercises.
- Too much time was taken up by the dissertation.
- Special skills of students were not fully developed.

It also noted that internal discussion existed in the department, with the way the course was organized to recommend that although recognition should be given up to the 1975 intake, it should be reconsidered once the department had a chance to set on its observations. In other words, if they did not pull up their socks future recognition might be jeopardized.

The university was so worried about the state of affairs that it set up an internal inquiry in the summer of 1976. Staff claim the two-man inquiry was particularly unsympathetic to their views and that its

findings tended to support the status quo.

At one point the report of the inquiry states "the staff took the view that the teaching and research of the department was of a high standard" (the words of Mr Melville, its professor, who was quoted in 1975).

"In a letter to the principal of the College of Art the senior staff writing allegedly on behalf of the staff of the department, to all intents and purposes, gave a 'thumbs down' to Mr Melville."

It also seems to doubt the validity of the staff "seeking to extract from Professor Melville some kind of declaration of intent as to his educational philosophy." It recommended most strongly that professional recognition of the course by the RTPI should be maintained "since this was clearly fundamental to the educational future of the department, its staff and students."

It goes on: "It is a matter of the greatest urgency that the departmental house be put in order prior to the proposed RTPI visit for the next academic year. We accordingly recommend that the head of

department be empowered to seek approval to appoint an external assessor to determine course structures and content."

The external assessor resigned, however, and the department was left with Professor Melville.

Staff complain that the professor has always been reluctant to offer them much influence over organization and the content of courses, particularly regarding what changes should be made to meet RTPI requirements.

"They say he is withdrawn, unwilling to exchange views and since he has done no teaching in his time in the department and not much in the years before joining has little idea of their problems. They also differ in their philosophical bases, staff tending towards more modern global views of environmental planning, taking in social science concerns, rather than Professor Melville's more strict town planning orientation."

Some staff claim he was opposed to having postgraduate courses involving sandwich components. After the internal inquiry the university put forward to the RTPI in 1977 ideas for change. The SSRC

also asked to be consulted since it provided studentships. It was so dissatisfied that it gave non-classified status to the course and withdrew the grants from the 1977 intake.

The RTPI's visiting party made encouraging noises but when the 1978 visiting party came in February it completely reversed its judgment. It noted that in response to the 1976 criticism some changes had been made but that notwithstanding these revisions the course is far from satisfactory.

"The additional elements seem to have been introduced in an ad hoc manner without regard to relationships with other elements. As a result it appears to consist of a series of disconnected elements which, through lack of coherence, fail to provide students with that understanding of the symbiotic nature of the planning process which should be an essential part of any planning education."

A failure of the department to exploit the potential of an integrated educational process has a secondary effect of overloading the course with projects, seminars, and lectures to the point where students

Simon Midgley surveys the changes in *New Universities Quarterly* in its 34 years of existence

Exploring the links between education, culture and society

Critical Quarterly was launched 34 years ago as a forum for informed discussion about the importance of achieving a planned rather than a haphazard development of university education. Today the periodical lives on—albeit in a very different form—as *New Universities Quarterly*, its title having been changed more properly to reflect a radical change in identity and role in mid-1975.

Its forebear, *Universities Quarterly*, was founded by Ernest Simon, later Lord Simon of Wythenshawe, at the time of the local authority educationists. Dissatisfied with what he considered to be the extraordinary unresponsiveness of universities in the post-war period, Simon was anxious to broaden the concept of university education.

Not only did he wish to make it available to more people, but he wanted to attract different kinds of students. Britain's relative lack of graduate scientists and engineers perturbed him especially and he was keenly aware of the need to expand these subjects' facilities for teaching and research.

Lord Morris of Greenwich, who as Sir Charles Morris, then vice-chancellor of Leeds University, took over the editorship in 1949, recalls: "Simon was very anxious to bring the universities to the attention of the educated public and, particularly of Westminster. There was awfully little about higher or even about secondary education in the press."

Before Morris's arrival *UQ* had concentrated mainly on discussing educational problems within the universities and on popularising developments in the United States. Under his editorship it vigorously campaigned for larger science and engineering schools and championed the need to develop the social sciences.

Over its first 11 years the quarterly achieved a certain reputation at home as a radical journal pressing universities to change and expand faster than they would otherwise do, while abroad its influence was quite considerable in the Empire and former colonies where British prestige was still high and considerable interest existed in what was happening in British thought.

In 1955 Boris Ford, now professor of education at the University of Bristol, became editor. At the time *UQ* had an editorial board "heavy with such progressive establishment figures" including Sir Maurice Bowra, Eric Aschby, R. H. Tawney and J. S. Fulton.

Professor Ford remembers their primary contribution being "to attend an annual dinner and put on a display of his dinner table. Under and with them, he says, *UQ* was primarily concerned with the growth and reorganization of universities and higher education, and rather less successfully with discussing ends and means."

With his first editorial the new editor introduced what was destined

to remain one of the journal's major concerns over the years—namely the problem of communication between specialists.

Commenting on a remark by Sir Charles Morris in an earlier issue that the sufficiently balanced person if he is a mathematician will read the poets, and if he is an historian will read the biographies of the great scientists, he wrote: "Which poets are read by mathematicians, or how much science is cultivated by historians and linguists, is a doubtful matter;... it is a matter about which the universities themselves are only fitfully concerned."

"The problem is in part one of communication... for it is a truism that the higher specialists no longer speak or write in common language, at any rate where their higher specialists are concerned."

"Without radically changing the nature of *UQ*, it seems an appropriate moment to consider whether a journal of this kind might not offer itself as a point of contact between specialists, writing about their own subjects but addressing primarily the specialist across the frontier."

"The immediate difficulty is no doubt one of vocabulary. But more importantly, it is an underlying that raises the problem of finding, even of establishing, a certain community of purpose and outlook."

Today *NUQ* remains equally committed to trying to find specialists who are prepared to attempt to communicate what is happening in their own disciplines to academics in other fields. However, Professor Ford is the first to admit that he has largely failed to make this interdisciplinary discussion, a serious part of the journal—largely because there are too few people around who are both willing and able to apply themselves to the problem.

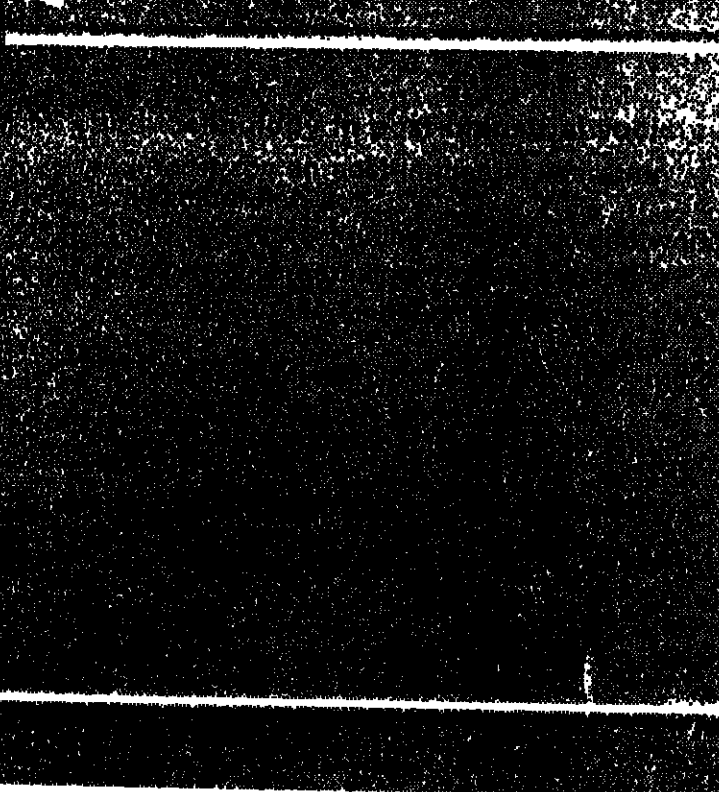
During the first 20 years of his editorship in fact *UQ* perhaps became the most well-known for the series of influential Gulbenkian Discussions which Noel Annan was instrumental in organizing from 1960-65. These discussions brought together a small group of fairly influential people to examine and discuss some pieces of current social planning within the field of further education before it was "too late", before ideas and plans had hardened irrevocably into fact.

In an editorial in March, 1961, Professor Ford commented: "It seemed possible that such a gathering of Top People, if it were small enough and sufficiently informed enough to give rise to genuine discussion, might make a modest but measurable impact, for normally the latter stages of an emerging project tend to be confined to meetings of specialists and elites."

The six discussions, written up in subsequent issues, tackled the following themes: 1960 "More and Larger Universities?", 1961 "Intellectual Responsibilities and the Pattern of Higher Education", 1962 "Research into Higher Education", 1963 "Attention to Graduate", 1964 "Changing Patterns of Study", and finally, in 1965 "Higher Education for the 1970s."

These discussions, and with them the magazine itself, says Professor Ford, "had a certain success in paving the way for and helping to establish the Robbins outlook on higher education."

By the mid-1970s there were a number of periodicals on the market concerning themselves with the content and structures of higher education (including *The Times*). The opportunity of a change of publishers (Thameside Press sold the periodical to Blackwells) to enable it to look like a journal, he says, "was the way of its own inclination. Professor Ford rechristened the journal *New Universities Quarterly*. Its new subtitle "Culture, Education and Society" clearly marked a shift away from its former rather parochial interest in higher education (it was originally subtitled "Higher Education").



Simon Midgley

Society") to a more broadly based exploration of the relationship between the three concepts.

The new periodical, Professor Ford said at the time, hoped to "initiate a genuine intellectual discussion whose absence at the centre of things has been so noticeable as to be galling."

The first editorial sketching the new direction asked: "What serious response has been made to the demand that students that their studies should be relevant? It is interpreted to mean relevant to the substantial problems of morality and politics, of culture and religion, to the problems of what we ought to do, to support, to enjoy, to be?"

Professor Ford commented: "The task of restoring the dialogue between academic expertise and learning on the one hand and human concern on the other is a very strenuous one. It must involve long, patient, and often fruitless discussion, thinking together, and in the case of an academic community, the serious investigation of substantial issues will involve moving towards action on many fronts: creative, political and cultural. A quarterly periodical must find its analogue of such action—*UQ* at present something of this kind through the series of Gulbenkian Discussions which it organised."

Not that this concern was a new interest for Professor Ford. In an editorial in the 1969 Autumn issue he said: "It is impossible not to sympathise with the feelings of very many students that the values of our society are cynical and self-seeking, and that the universities should offer an education which bears upon the condition of society and is critical of it."

Later in the same editorial he quotes F. R. Leavis in "Education and the University" who spoke about the social condition which means of bringing the various essential kinds of specialist knowledge and training into effective relation with informed general intelligence, humane culture, social conscience and political will."

With the change of ownership, and editorial policy came an almost entirely new leadership team of editors who together made up the new editorial panel which replaced the former editorial board. The distinguished names of the old board (there originally to touch for *UQ*'s bona fides) were succeeded by a new, smaller group of "like-minded" editors.

similar "set of worries and preoccupations."

The new panel—which includes among others Krishan Kumar, a lecturer in sociology at the University of Kent; Colin Crouch, a lecturer in sociology at the London School of Economics; Roger Poole, a lecturer in English at the University of Nottingham; Richard Jaggard, warden of Goldsmith's College; and David Holbrook, writer and critic—takes a much more active role in determining the nature of the periodical than the body it replaced.

Although Professor Ford remains very much in control of the editorial process—individual members of the editorial panel do suggest particular themes for specific issues, for example, Colin Crouch and Fred Inglis, a lecturer in education at the University of Bristol, were closely involved with the production of last Spring's issue on "Morality and the Left" and Krishan Kumar was 1977 issue on "Work and Technology in a Post-Industrial Society".

NUQ, says Professor Ford, is very concerned to explore the relationship between culture, education and society. "How far do these segments inform each other in their values? We are concerned that in all of this there should be revealed a concern about the 'meaning of life'."

Explicitly recognizing the influence of his former teacher at Cambridge, F. R. Leavis, Professor Ford admits to some of the concerns that pre-occupied Scrutiny, the contraband of which is ranged along his office shelves—*Scrutiny* described the *Pelican Guide to English Literature*, which he edited, as an attempt to do a work of *Scrutiny* on a more popular scale. Several other members of the new editorial panel also acknowledge a similar debt.

"I think we are picking up the wider implications of his work," he says. "But we would not want the narrowness and intolerance. It makes one lot of his impact on society."

Among the interests he feels that *NUQ* has inherited are "a positive concern about the quality of society and individual life within that society; his interest in the role of the imagination; and understanding and sympathy for great works of art. In fact, what makes for 'Life' as Leavis said."

universities one suspects that Professor Ford would agree with R. H. Tawney (quoted by Richard Time For "After Expansion": "Universities are also places in which people are made aware of the moral situations of their disciplines, are led to question in terms of life offered by the societies and those they have to propose for themselves."

"We are concerned not in the negative in being bothered," says Professor Ford, "to find the area in which it is possible to be positive in relation to culture and cultural developments."

"If a book is no good, it is better with it? He is sympathetic to the kind of movement he associated David Holbrook with—which he describes as a 'cultural philosophical anthropology'. It shares its 'emotional hope'. He feels we have had our bellyful of the cynicism of the 1960s and 1970s. We are seeking genuinely positive visions and introductions to what is going on."

"One is very saddened by the nihilism which has imbued certain quite fashionable intellectual circles. The extraordinary occupation with violence. The fashionable preoccupation with suicide. The extraordinary currency of certain writers like Sylvia Plath. The enormous nihilism of Ted Hughes's work. We hope to represent something altogether more positive and life building."

NUQ is against cynicism, "clericalness", an "easy tolerance of passivity—the attempt to suggest that the Beatles are the Schuberts of this Age", and pornography—"an industry devoted to the destruction of the child. This, he says, has opened up an essentially positive vision of what a human being's capacities actually are."

He is also concerned about the "human implications" of structural change and ossification both in higher education and in society at large. Commenting on British preoccupation with the structures over the past 20 years, he says: "The structures we have created are absolutely resistant to the asking of significant human questions and to human change. We know how many universities could in a relatively change themselves if they wished."

"We are still very anxious to try to loosen up the isolation of specialism", he says. "I feel more strongly than formerly that higher education is organised too strongly for the sake of specialists, that it is very hard to talk to each other."

Another of the new quarterly's preoccupations, as evidenced by issues like "Health: Care and the Community" and "Work and Technology in a Post-Industrial Society", focuses on the attempt to analyse the drift of society and to discover ways in which the life of a person in any part of the industrial machine can be made somewhat more meaningful."

Fred Inglis is critical of the absence of a specifically agreed editorial policy, and sufficiently worked-up to approach to the problems of analysing society. Professor Ford is reluctant to be hortatory in editorials and prefers to let the character of the quarterly make itself felt through the accumulated impact of the published articles.

Inglis believes that *NUQ* has not called upon the best people in the country, and he suspects that if it did they would be reluctant to contribute. He describes it as a "fairly traditional liberal social position" and reflecting "a lot of understanding within the social democratic community about where the hell things are at." He is also unhappy at the editorial panel represents a sufficiently broad spectrum of disciplines.

In the 1960s *UQ* made itself the place where the implications of university expansion were debated. Its Gulbenkian conferences were influential, its pages open to free discussion. Now that discussions must be written for the future, the editorials are written for the present. To the extent that *NUQ* chooses to set this debate within a larger historical and philosophical context both of the past and in its new series of "What makes for Life" as Leavis said.

Where can writers find the economic and spiritual support they need before and even after fame strikes? John Wain nominates universities

So situation is perfect for the writer. He is caught in a very simple trap, simple, but deadly. If his work is sufficiently recognized to enable him to reach a paying public and live solely by his pen, he is condemned to a life of lonely slavery at his desk; during his working hours he sees nobody, goes nowhere, involves himself in the life of his fellow-men not at all. If he needs more money than he can make by writing and takes to a dangerous métier, he has a hard struggle to prevent the *deuisme* from becoming premier, the rail from swallowing the bee.

So much for writers without private means. For those fortunate enough to have them, the problems are still not over. Private income people tend to associate with other private-income people. The third case may prove to be only a more comfortable, less misery-ridden version of the first.

Most ways of earning a living are arduous and time-consuming. In the effortful and day-bound modern world, the professional have become highly competitive structures, a jobs that put a reasonable income for doing comfortably little, have all but vanished. In the seventeenth century, some of the best English poets were country parsons. A country parson today spends his life at the wheel of a second-hand car trying desperately to get round the enormous world he is supposed to look after, usually three or four parishes merged into one, and struggling with the financial problems of maintaining the fabric of ancient buildings. Similarly with administrative work. Wordsworth in later life was Controller of Stamps. Is there a Controller of Stamps now? And is he, could he possibly be a poet?

George Orwell remarked that the writer occupies the same place in the scheme of things as the house-sparrow: tolerated, but not encouraged. This seems to me one of the sad things over said about the profession of letters, and a good starting-point for discussion. The house-sparrow is a wild creature that is not actually hunted, like hare or salmon, nor selectively exterminated at the whim of officialdom, like the badger; nor might against an army of scientific weapons, like the rat or the tape-worm. He is left alone to find his lodging and survive on the edges of a world that was not designed with him in mind. The sparrow nests under the eaves of houses but the eaves were not built to shelter him. He picks up crumbs, yet the baker who kneaded the dough had no thought of him. If he can find an earthworm he will, but the gardener would rather he left the worms alone to aerate the soil.

In every age, the power, the wealth, the resources, settle themselves into a pattern and then the sparrow-artist looks at that pattern and tries to find his own place in relation to it. Just as fish will situate themselves at the point where a brook crosses a river, so as to feed on the resources that the brook brings down so the writer has to find the point at which the nutrient flows.

Centuries ago it was the rich private patron. Then it was the reading public, the large body of ordinary people who habitually buy a little of their income on books, in the days when paper and printing and transport could be bought for a sum that will now just about buy a newspaper. Today it is the education system.

What the writer is forced to seek out is not merely the area where the resources are; it is the area where the resources are and where they can be channelled towards him. He has wealth, but, except for the occasional prize, gives none of it to literature. (Why should it?) Politicians dispose of the vast sums gathered by taxation, but they are earmarked for one purpose (other than helping books to get written, which is a moment). The one area where there is a substantial wealth and willingness to drive a bargain with the writer is that large and variegated field, the instruction of the young.

It is this fact that drives so many writers to the universities. It may or may not be that a writer enjoys contact with young people, or may not be that he likes the sound of his own voice, or may not be that he benefits from a bookish and scholarly atmosphere. There may be any number of reasons why he finds himself a member of a university teaching faculty:

The sparrow who craves a warm and lighted room



David Ruckley

but the essential reason is that they are prepared to give him a salary. Society has at last decided what it wants to do with the literary artist. He needs no longer entertain the populace, or set the tone for polite society, or impart his wise insight to the men in power. What society wants him to do is to instruct the young—to amuse, to interest, to inform them, to raise their tone.

Samuel Johnson, in his stately lament over the fortunes of his friend Savage, incidentally defined his own notion of what a poet might actually do.

On a bulk, in a cellar, or in a glass-house among thieves and beggars, was to be found the author of *The Wanderer*, the most of usate sentiments, extensive views, and curious observations; the man whose remarks on life might have assisted the statesman, whose ideas of virtue might have enlightened society, or impart his wise insight to the men in power. What society wants him to do is to instruct the young—to amuse, to interest, to inform them, to raise their tone.

Once again, we are in the presence of a notion that has been pushed through too quickly and too blithely. The traditional role of the European university has been its legitimate subject-matter has been literature, but this has meant the Greek and Latin classics and the vernacular masterpieces, which involved linguistic and historical study and thus exercised the student in many directions. The notion that contemporary literature can be an academic subject is relatively new and has yet, it seems to me, to prove itself. Yet it is this notion that underpins the whole involvement of the writer with the university.

To recapitulate what I have said so far: the marriage of the writer with the university is, from the writer's point of view, an expedient; it is a means of diverting to himself some of the resources of his society. From the university's point of view, it is a well-meaning attempt to offer what seems an attractive facility and not to fall behind other countries in offering opportunities to youth. It is a marriage of convenience on both sides, and like many marriages of convenience it may progressively reveal its drawbacks as the couple try to settle down.

So much for generalizations. Now to my own case. When was an undergraduate at Oxford, I fell in love with scholarship and the apparatus of scholarship (libraries, and old books, and the general atmosphere of discussion and comparison.) I was already in love with literature itself, to the extent that I knew and understood it, but now I became enamoured of what seemed to me the essential approach to literature, namely scholarship. I am not ashamed of this. The magic of Oxford worked on me and I cannot see that my contemporaries on whom it failed to work were any better than I was, or have turned out any better since.

It resulted, however, in a certain *détour* in my life. After getting my First, I proceeded to a research scholarship and when I left

another university. All this time I was aware of a creeping malaise. Something about me I was not doing what my life wanted me to do. I enjoyed reading great literature and I enjoyed talking to people about my reading, even when the talk took the rather laborious form of sixty-minute lectures. But I felt wrong, as if somehow my skin did not fit me, and this feeling increased with time.

To make the picture complete I should add that I had always, from the moment when as a schoolboy I voluntarily began to read poetry, wanted to be a poet. I wrote poetry at Oxford, though I did not (thank heaven) publish much of it. My ambition in my early twenties, if I had formulated it other than vaguely, would, I suppose, have been to become the kind of scholar-poet who gives proof of his sensibility in exquisite scholarship, and proof of his scholarship in exquisite poetry. I am not meeting his ideal; but it was not the right one for me.

The stages, partly sad and partly comical, by which I approached the end of my career as a university teacher must either be described elsewhere or left in decent obscurity; the discontent, the burst of rebelliousness, the mysterious compulsion to quarrel violently with everyone who might have helped me in my academic career.

All this time I was writing my first novel, *Hurry On Down*, and when in 1953 this appeared and attracted some attention, the door seemed to me to swing open. It took me another year to pick up the threads to leave my secure employment, and of course everyone told me it was a fatal mistake, but only I knew what my situation felt like from the inside, and I knew it would be a worse mistake to stay where I was.

To say this is certainly not to denigrate the University of Reading, which employed me. They had shown a kindly interest in my wish to be a poet, and had even printed, in the School of Art, an elegant limited edition of my first book, the statutory "slim volume". What made the arrangement unworkable was not that they were both to have a poet on the premises, but my own wish to go beyond writing slim volumes of verse and pour my energies more abundantly into literary creation, accepting it as a vocation, accepting its disadvantages along with its excitement and freedom.

I object to financial insecurity as much as anyone else, yet I am firmly of the opinion that it is a good thing for a writer to be free-range if he possibly can. There are too

continued on page 12

All that we really know about the future is that we do not know what lies in it. We can guess, and indeed we have to guess, and any kind of planning becomes impossible. What tends to be forgotten is that for effective planning we also need to ask ourselves how our guesses are, and to answer that we have to look at the assumptions underlying them.

Generally an attempt at prediction starts with the assumption that the relevant variables will continue to move in the same direction as they have been moving in the recent past, and then adds an assumption, often modified in a subjective way, that movement will continue at roughly the same rate. In predicting future numbers of students, the key variable, however it is described or subdivided, has to be the percentage of 18-year-olds wanting to enter higher education.

The DES extrapolations, to produce the estimates of future numbers that form the starting point for the discussion document, take account of the element of subjectivity by offering not one but three possible future levels. However, the three predictions all have the same basic assumptions—this variable will change in a smooth and regular manner. It is this that is responsible for all three assumptions having the same shape of a hump followed by a decline.

There is a basic improbability about this assumption. In recent years the percentages of 18-year-olds wanting to enter higher education have not changed in a smooth and predictable way. It is more likely that, if there were no constraints on numbers other than the need to keep entry requirements steady, the numbers would move zig-zag, perhaps staying within the area bounded by the DES's upper and lower projections, but perhaps not.

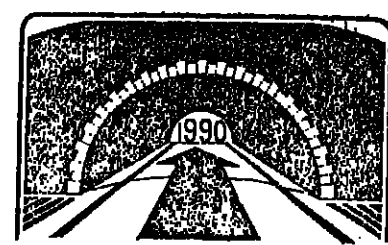
One of the main worries about the inevitable use of planning of figures which, though they may be as good as can be produced, are almost certainly wrong, is that the projections may become self-fulfilling. If the money allowed to universities and polytechnics for the next decade is based on the projected figures, the numbers admitted are likely to be close to the projections. Should the number of candidates for places be lower, however, predicted, every university will have a hard time and the numbers admitted will not fall enough fully to reflect the error in the prediction; while if the prediction is too low a few extra students may be squeezed in, but on the whole the planned figures will determine the number admitted.

The alternative I would put forward is acceptance within the planning process of uncertainty about the future. Planning would then be adapted to uncertainty, so that its consequences are known at every stage. In particular, I see two ways in which this ought to be achieved.

The first is to build flexibility

The 1990s—policies for uncertainty

Ernest Rudd suggests how universities could add more to the debate on education into the 1990s



into plans so that they can be changed in mid-course. For example, buildings should be designed so that they can be adapted to a range of uses. Such flexibility will not always work—sometimes its cost will be higher than that of scrapping plans altogether; building flexibility into planning represents a general aim and outlook rather than a rigid formula. In general it means a constant review of the trends so that plans can be quickly revised and also an especial awareness of the danger of self-fulfilling prophecies.

The second implication for planning of our inability to see the future with clarity is that any step which measures which could be positively harmful if the projections prove to have been wrong. A good example is the proposal to smooth over, or as some have been putting it, tunnel through the hump by such measures as temporary deferment of entry to higher education, putting students onto two-year courses or temporarily borrowing potential teachers from other employers.

The success of such schemes is dependent on our knowing precisely when the hump will come. If adjustment measures are applied too early, so that their effect is largely before the hump comes, they could delay it, they could even make the rise to it steeper, but they are unlikely to flatten it. If they are applied too late, they could make the fall after the hump steeper.

The DES projections give dates for the hump spread over five years, which allow kind make precise planning of this kind difficult. Moreover, if student numbers zig-zag there could be more than one hump. Alternatively, there may be no hump at all. Whatever is to happen, there can be no certainty in advance of when a hump is coming. Indeed, even after the event, given the range

of interpretations that may be put on small movements, and given also the time lags in collecting and putting together statistics, we are not likely to know we have passed over a hump until some years later.

Given also the difficulty of controlling precisely composed schemes for "tunnelling through" the whole exercise becomes rather like firing at a target in the dark, using a rifle with defective sights, when the consequences of failing to fire at all, or worse than that of not firing at all, in other words, it is something that should not be attempted.

But, however great the uncertainties of the future, it is wise at present to assume in planning that there is likely eventually to be a falling away in the numbers of school-leavers wanting to enter higher education—it may not happen but it seems the most likely future. The most comfortable way for the universities and polytechnics to meet this drop in custom is by finding other students. Also, offering a greater range of courses for a wider variety of students provides a greater measure of flexibility, in that staff can more easily be moved from one kind of teaching to another. In industry this is known as diversifying the product, and many firms that have failed to do it have collapsed.

Many comments on the discussion document have opted for this diversification (Model B) without looking at the complicated problems of the future. These arise merely from the elementary point that if you develop elaborate plans to fill in the trough behind a hump you need to be sure where both the hump and the trough will be.

There is another, and to my mind important point. The changes in both the document and ministers' speeches have suggested a need for which would fill in the trough, and which would be needed now. A strong case has been made that there are certain social and economic needs which the higher education system is not yet adequately meeting. One can think of others too—for example, retraining courses for women reentering the workforce, or bringing up a family. It would be wrong to delay what should be done now only because to do it later would suit us better.

Increasing our efforts to meet such needs now does not mean that we shall not be able to expand into new areas to fill in the possible trough. Providing new

kinds of courses, or the same kinds of courses in different kinds of students, means in most cases years of experimentation and gradual growth, with relatively little to show for some years. Numbers will build up gradually and, where the experiments are successful, growth will continue. If and when the numbers of 18-year-olds decline, the numbers of 18-year-olds declining.

However, increasing the efforts put into these various directions will inevitably result in raising the height of any hump that lies ahead and produce a need for more resources. Ministers have succeeded in persuading a surprisingly high proportion of the higher education system that there are essential tasks needing more effort. They now need to persuade themselves to provide the money.

One area where changes on any scale are likely to take a substantial time is an increase in the percentage of students from working class homes. There is a lot of muddled thinking on this—not least in the document, which blandly asserts "that participation by this group

The universities' research and scholarship are functions strangely ignored by the discussion document

will by the 1990s be as much affected by the gathering of policies in the fields of housing, health and the social services generally as by educational policies. This could be justifiably cynical comment on the efficacy of educational policies. Otherwise the question is why should social policy be expected to have an effect that the substantial changes brought about by the past have not had?

Other muddled thinking is to be found in the neglect of the fact that the proportion of working class children who have entered the middle classes via higher education has been rising for many years, and in the smug assumption that to join the middle classes is the ideal to which everyone should aspire.

The author is a reader in sociology at the University of Essex.

on the part of the Arts Council. I believe that in the end there is no healthier relationship for any artist than a relationship with the paying public. Of course the public make mistakes, they flock to buy kitsch and rubbish, they make millionaires out of indifferent artists and starve good ones; but the system of sale to a public is, as Churchill said of democracy, "the worst system in the world, except all the others".

In discussing the situation of the writer vis-à-vis the university I seem to have rambled over a wide ground, but it seems to me that the subject cannot be discussed except in the general context of one's views about the profession of letters generally, and what is good or bad for the writer. And teaching, surely, is bad for him; all work that is not writing is bad for him, but teaching especially because it is semi-creative and leaves him drained. (A teacher who is not drained by his work is just not teaching properly.)

Having said all that, I must finally admit that this is a very imperfect world and that in the effort to find a place to shelter, the writer will go where people invite him to. And the university, as a milieu, is better than most because it brings together intelligent and informed people who have—very often—a sense of dedication.

With complete freedom to live anywhere I choose, I live in a university city and have in fact lived there longer than anywhere else. A writer's life is by definition a lonely one, and perhaps, by providing a congenial atmosphere, the university is doing the second most important thing anyone can do for him. The first, of course, is to read his books.

The author is former professor of poetry at Oxford University. His last novel is *The Pardoner's Tale*, published last week by Macmillan at £4.95.

The grants for sixth form study may influence some children's decisions on whether to enter higher education—the numbers affected will depend on the parental income scales that will determine who gets how much, and on how many children find at 18 that their parents cannot or will not provide the money needed for further study.

Recent changes in relative incomes, by making it possible for a skilled worker to earn more than a teacher or university lecturer, have meant that many working class parents are expected to pay relatively large parental contributions if their children go on to higher education, and their unwillingness to do this is keeping working class children out of the universities and colleges.

However, for many this new incentive to study will come too late because their lack of achievement long before this stage effectively rules out sixth form work. The real problem is not the percentage of higher class children reaching so little education. That is merely a symptom of the real problem, which is that so many children, some but far from all of the working class children, and many children of the middle classes—are getting on with their education at every stage, and that so many are not so much dropping out as never joining.

Some secondary school teachers claim that many primary schools are failing to give children either the wish to learn or the habit of work, and this, especially affects working class children because they are under less parental pressure to do well at school, and that by the time children reach secondary school the damage is too great to be remedied.

The range of causes, known or suspected, of differing performance is very wide, starting with influences before birth, including the greater propensity of working class women to drink and smoke during pregnancy. Though their significance has been relatively neglected, the strength of cultural factors has long been clear from, for example, differences within Britain, especially between England and Wales, and from the performance of the children and grandchildren of the working class Jewish immigrants who entered Britain and the USA between 1880 and 1910.

How the universities can contribute to the solution of this problem is by their research and scholarship—functions strangely ignored by the discussion document. If ministers wish to see some real progress towards the solution of this major problem, they should, instead of preaching at us, bring together a group from the universities to look at what is known about this and what remains to be discovered, and to spell out the policy and research implications of our knowledge and ignorance.

The author is a reader in sociology at the University of Essex.

Sparrow craves warm and lighted room

continued from page 11

reasons for this. The first is moral. The one thing a writer has an obligation to do is write. Everything else is a side-track. There is no reason why he should reach other people how to write, or teach other people how to write. He may even find some enlightenment in them, but he is under no obligation to do anything but write. No obligation in this working life, that is.

Naturally, once he leaves his desk the writer is under the same obligation as everybody else to do his bit towards solving the problems of the society he finds himself living in, to judge it towards being just and decent, to be politically and constructively in social and political matters. It is also, like anyone who wants to develop some kind of vision and share it with others, under an obligation to live fully and not draw back from it. The writer who lives timidly or frivolously will by the end write timidly or frivolously; he must be himself a true poem. By which I do not mean that he must be a Ghalib, but that he must write from a full, participating life, with the attendant risks and sacrifices, he will turn away from it also.

To take a concrete instance: it seems to me that parenthood is of immense value

to a writer, as it is to anyone who wishes to see deeply into life; when one becomes a parent, emotions are unlocked which were previously lying dormant and unrecognized—a whole area of the self comes into the light with the new relationship. Unless there is a very strong reason for not having children—homosexuality, for instance, or transmissible disease—I think a writer does well to have a family, with all the multifarious involvements that a family brings. Which means, of course, that he will have the terror into a family: a prospect to strike well said, *Père de famille est capable de tout*. He has to be.

The second reason why a writer should stay free-lance follows naturally from the first. He has an obligation to himself, and to his family, to live a normal life and support a family. solution—get a job and work for it—has drawbacks. Very few people who have not tried it realize how time-consuming authorship is.

Personally I do not believe that any book worth ever written quickly. I know that some of the 19th-century novels were actually committed to paper with incredible speed, but they must have been incubated at a pre-conscious level for years. The writing of an imaginative work takes longer than budgets for; there are the days when one can't work, the inevitable interruptions, the whole sections that turn out wrong and have to be done again. What every writer needs to be done again. The best present anyone can give him is a warm and lighted room with a look on the door.

The Arts Council recognizes this and gives writers money now and then to rid them of financial strain. This is well meant; nor do I see anything morally wrong in the idea of

literature's being "subsidized". We are living in a world in which virtually everything that is not directly profitable is subsidized: medical research, work with young people, agriculture, so why not literature? The hill farmer receives a bigger subsidy than the lowland farmer because it is recognized that his work is more difficult; well, so is a writer's work difficult.

The real trouble is that a writer who works at a job can never really use a subsidy to buy time. His hours at office or college or wherever, are fixed and the more fact that he has some money in his pocket will not shrink them. Only the writer who has pushed away from the security of employment, and is lost on the wide economic sea, is in a position to use a grant directly to buy time.

Thus the writer who works at a university on receiving some financial aid, might be able to spend the long vacation in some congenial spot—a Greek island, say—rather than at his home in the suburbs. But wherever he spends it, the long vacation is no longer for him than for his colleagues. The free-lance writer, and he alone, is able to say, "Good. No home between now and Christmas" and get the cover off the typewriter immediately.

I realize that I have been writing as if I were regularly supported by Arts Council grants, so for the record I will mention that I received one grant of £1,000. By working managed to live, however modestly, on the sale of my books to the public, 1,000 divided by 25 comes, I think, to 40, so I have taken in just about the sum I spend on my typing paper.

That, however, has been my personal decision, and nothing to do with any singiness

Tom Schuller argues the case for giving employees time off work to further their education

To many people, the idea of giving all employees the right to time off work to pursue studies of their choice is far-fetched. For a long time the notion of paying people to take a holiday was equally far-fetched, and it is only very recently that the third and fourth weeks holiday that most people now take for granted were established as normal.

In this article I want to give some depth to the background by looking at the introduction of paid holidays—which were educational only in so far as shrimping and sea air could be said to broaden the mind, sharpen the faculties or whatever—and drawing a number of relevant parallels with the prospects for paid educational leave.

Analogies, it has been said, are crutches to be discarded as soon as we can do without them. Yet the effects of negotiation and legislative initiative, the way in which progress was made in sports and formed part of governmental pacts with labour, and the broad similarity of many of the arguments should help to bring the discussion of paid educational leave into sharper focus.

There will naturally be a tendency to stretch parallels beyond their legitimate elasticity. But if we take the current incidence of educational leave, there must be very heavy odds that the joint SIT/NIAT study under way at the Middlesex Polytechnic will show occupational groups (and the sexes) benefiting in very different degrees, broadly similar to the position of paid holidays before the First World War.

Up to 1918, most salaried employees had one or two weeks paid holiday, but this was wholly exceptional for manual workers. It needed a war, and the subsequent acceptance of social reform as a reward for bloodshed, to prompt a large-scale extension of paid holidays.

This phase lasted only from 1919 to 1922, but it saw more progress than the previous 30 to 40 years, and little further advance was made until just before the Second World War. Even so, when the issue was first seriously debated in Parliament in 1929, there were still only some three million workers, out of a labour force of roughly 12 million, who enjoyed the right to eight consecutive days paid holiday.

A Private Member's Bill calling for six consecutive days holiday with pay for all those with twelve months continuous service had been introduced in 1925, but such was the lack of support that it failed even to get a second reading. Initial impetus on the issue was generated by collective bargaining rather than legislative proposals, and one can readily draw the relevant lesson for the advance of paid educational leave today.

In 1929 there was enough political head of steam for a proper debate to take place in Parliament, on a Bill calling for a right to eight consecutive days. Hansard furnishes several coruscating gems of social wisdom from the Tory benches, such as D. C. Somerton's observation: "Under this Bill, you will take away from all those people the incentive to save for their holidays... Do you not think that something for which you have saved up is very much more worthwhile and more interesting than the knowledge that you are going to draw just your week's salary or wages from your employers?"

A little rephrasing, and we have the arguments about working one's way up through night school, the opportunities being there if workers wish to take them, and so on, which will certainly be heard in future debates on paid educational leave.

There was also the "industry is too fragile to bear it" argument, remarkably reminiscent of recent reactions to the push for industrial democracy. Captain Austin Hudson referred to the proposal to introduce paid holidays as "another of those gestures which are so terribly unsettling to industry."

The impact on industry and jobs had already been dealt with by the proposer of the Bill, Ernest Winter: "Even if it should mean that more people will be brought into employment to fill the gaps of those who are taking their annual holiday, is that a reason which is going to be turned down in this House in these days when all sides are encouraging the Lord Privy Seal to find more work for the people? I suggest that here is one means, at least, of alleviating the burden of unemployment." Substitute Albert Booth for Lord Peart and you have an argument tailor-made for proponents of paid educational leave.

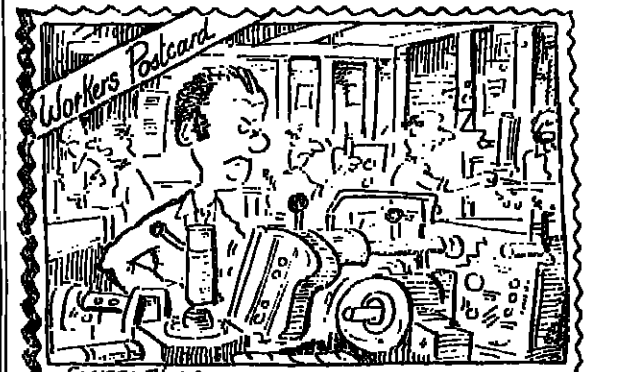
The Bill was given a second reading but then slid into the murky waters of a standing committee and never re-emerged. But it is worth staying on the parliamentary trail in pursuit of the paid holiday/paid educational leave parallel, as the next debate (1936) was provoked by a draft ILO Convention, and the ILO's 1974 Convention on paid educational leave has played a major part in stimulating current interest in the subject.

The earlier convention had more bite, since it was quite categorical that the six days holiday which it proposed as an objective should be paid, whereas the later leaves the financing issue to one side. In the event, the Government abstained from voting on the convention, but it did set up a Committee of Inquiry under Lord Amulree.

The next few years saw a major extension of coverage. Six hundred thousand engineering workers won an agreement allowing them to accumulate "holiday credits", and they were followed rapidly by miners in Nottinghamshire, shipbuilders and steelworkers. From 1.5 million in April, 1936, the number of workers covered by collective agreements (i.e. in effect, omitting salaried employees) increased to 4 million in less than two years.

Why? Partly because of the upturn in the economy, but also because employers wished above all to abort the possibility of legislation which would embody financial obligations, and to keep the holiday issue

Leave to learn for everybody



within the realm of free collective bargaining. Interestingly, therefore, we have the picture of workers' rights being advanced through negotiation backed up by the prospect of legislative action.

Financing was obviously a major issue, as it is with paid educational leave. The engineers' scheme entailed crediting to the employee, for each full week's work, a sum representing 2 per cent of the appropriate day-time rate plus bonuses, the credits being accumulated in a special fund and paid out at recognised holiday times.

A similar scheme exists in Norway for a training fund (though with the employees contributing one third to the employers' two thirds) and the formula may be quite appropriate today, especially as it allows a fair degree of flexibility.

The TUC in its evidence to the Amulree Committee argued for universal coverage on three grounds. Paid holidays were a social good: they would contribute to efficiency by reducing industrial fatigue; and their extension to the working class would chip away some of the invidious barrier dividing manual and black-coated workers. The first point requires no comment, and the relevance of the third to the paid educational leave debate is quickly perceived if one reflects for a moment on the social groups which today have privileged access to further education and training.

The second argument—the impact of holidays on health and efficiency—is worth pausing on. A recent OECD study comparing paid educational leave in six countries made the point that in so far as it exists in the UK, educational leave tends to be closely tied to vocational requirements, in contrast to those countries where it is established more as an individual right.

While, therefore, one could argue for paid educational leave simply as a means of raising skill levels and improving our manpower capacity, there is a strong case to be made on broader and genuinely liberal grounds for the extension of paid educational leave as a powerful means of refreshing the intellectual vitality of the working population. At this point, our parallel workers' unlike strong and healthy workers, intellectually curious employees may not be universally welcome to employers.

It is also worth noting that the TUC favoured legislation on the issue as this would extend the benefit to unorganized workers. A basically similar problem arises in the case of paid educational leave, in that by definition does not cover the unemployed (registered or unregistered) who might consequently suffer further disadvantage.

Back to the story. The basic message of the Amulree Report was to encourage voluntary agreements so as to minimize the part left to be played by legislation.

At one point the Government looked as if it would introduce comprehensive legislation, in the 1940-41 session, but this prospect melted away in the heat of the war effort. Agreements did in fact proliferate, and again there are instructive parallels to be drawn.

The first concerns the way in which benefits gained by one group of workers are more easily won by others following on their heels. (This has been precisely the route taken in Italy, where the metalworkers' union pioneered a paid educational leave agreement in 1973 and the formula they pushed through has been adopted in modified form by textile workers, health sector employees and others.) Today this is more likely to happen through a more developed system of national agreements and greater awareness by trade unions of their comparative positions, combined with the strength to work the ratchet principle.

In 1940, the means were different. The Control of Employment and National Arbitration Order stipulated that conditions recognized by organizations representing a substantial proportion of employers and workers in any industry and district had to be observed by employers generally in that industry or district. But the effect was the same: to accelerate the spread of a benefit, once pioneered.

There was a second reason for the rapid extension of paid holidays in this period. The war prompted greater labour-management cooperation, embodied in the institution of Joint Industrial Councils, many of which concluded general agreements on paid holidays. Here the parallelism with paid educational leave is more contentious, but I shall propose it anyway.

Recent moves towards industrial democracy may not be the result of warmer labour/management cooperation but they do represent a greater degree of joint decision-making, especially if they are conceived of as basically a further extension or reactivation of collective bargaining, and we may well come to see the proliferation of paid educational leave as closely bound up with that of industrial democracy.

This is all the more probable since the effective democratization of work demands very substantial educational provision for all of those involved. So one has on the one hand the intrinsic argument for paid educational leave as a necessary condition for the extension of collective bargaining, and on the other the natural trend, illustrated from history, for new forms of worker participation to bring in their wake a wider diffusion of leave benefits.

We have at present no clear picture of the extent to which paid educational leave occurs in different occupations and industrial sectors. But if one had to guess on the basis of history, the public utilities would be the most likely to have granted it to all their employees—nearly so, if one considers that the public sector should give a lead to private employers.

The gas and electricity industries were the first to concede both a first and a second week's holiday to manual workers. The record was further improved as they led the way in extending the coverage to three weeks, the electricity industry in 1960, gas in 1961. Will we see the precedent maintained?

Underlining the parallelism between paid holidays and paid educational leave has one further advantage. People cannot simply take their holidays when they want. In many cases they are very tightly constrained, or even compelled to take them at a given time, such as when a plant closes down entirely for a three-week period in the summer.

There is a very strong case for extending to everyone the freedom of choice which at present attaches to higher-level jobs, but there will always be organizational constraints which must be accepted. However, these restrictions do not apply to the choice of holiday place, or how one spends one's time. No personnel director dictates to his employees which seaside resort they should frequent ("You're looking a bit flabby, Jones; 15 days' cycling in Snowdonia for you").

Similarly, the establishment of a genuine right to paid educational leave means allowing the individual the maximum of choice subject only to organizational requirements. Employers in any event lay on training courses, and these are in many cases helpful to the individual's career development, but they cannot be represented as a genuine benefit. Of course, the worker may opt to exercise his right to paid educational leave by studying a purely vocational subject; but if the parallel holds, it should be his choice.

Paid educational leave is potentially one of the more effective tools for levering our educational system into a more recurrent mould. It is important not only because it affords working people a genuine chance of taking up opportunities which would otherwise be available only in a nominal sense, but also because it can bring trade union muscle behind the push for an extension of educational rights.

A combination of legislation and negotiation is the likely way forward. Unlike the 1930s, when the slump had so weakened organized labour that legislative action was the only realistic approach, today's unemployment crisis has not so weakened the trade unions that they cannot press for significant advances at the bargaining table, and at the same time for the kind of legal, "minimum floor" which has been laid down in other areas of labour law.

Three weeks' annual paid educational leave may be some way away, but the possibility of a substantial reduction in working hours, combined with the mood of educational change reflected in the Department of Education and Science document on higher education in the 1990s, puts the issue firmly on the agenda.

The author is a research fellow in the Department of Social and Economic Research at the University of Glasgow.

BOOKS

May the force be with you

The Blue Coated Worker: a sociological study of police unionism by Robert Reiner
(Cambridge University Press, £12.50 and £4.50)
ISBN 0 521 21899 6 and 29482 7

"Bobbies", "New Centurions", "Uniform", "Carriers", "Social Workers", "Professionals" and "Federation Activists" are the names given to Dr Robert Reiner's six types of police character and they are taken from the responses to his questionnaire administered in 1973 to 163 policemen and five policewomen in a provincial force, which must have been given the author's affiliation and internal references to one of the local football teams) Bristol.

His tape-recorded material is often vivid and echoes with the splendour and miseries of the constabulary condition. Its subject is wider than the subtitle would suggest, and extends to a broad range of questions about police behaviour, crime and punishment and social policy. But much of the book is concerned with the activities of the Police Federation and the possibility of police unionization and affiliation to the TUC. On the question of strike action and of TUC affiliation the respondents were

solidly conservative; 82 per cent were opposed to any police entitlement to strike action; 56 per cent were opposed to the right to go slow or work to rule; and 62 per cent against affiliation to the TUC. At the 1977 Annual Police Federation Conference a motion, perhaps surprisingly, was carried in favour of seeking the right to strike.

This, Dr Reiner suggests, may have been an "explosion of consciousness" (though it seems more like a puff of short-term impatience at the deadlock in pay negotiations, now somewhat appeased).

Two major kinds of reason were offered against militancy, and unionism. One was the incongruity of the mode of collective action with the needs of a disciplined force: "There comes a time in the force when action is needed. And somebody's got to say 'Well, I want that done, you can't have all the soldiers getting together and saying 'No thank you, we'd rather retreat'". The other proffered reason was the need for preserving the impartiality of the police in situations of industrial disorder. This raises an issue which I think Dr Reiner has not adequately analysed. He asserts that "the police occupy a contradictory position in the class structure". On the dust

jacket this is announced as "the central contention of the book". But nothing in the survey results justifies such a conclusion. The implied argument seems to be that the police are engaged in upholding law and order and, while themselves wage earners, are potentially forced into conflict or confrontation with trade unionists. But it hardly follows from the proposition that policemen are as a matter of fact sometimes brought into conflict in industrial disputes with individual trade unionists that the police role is in principle in conflict with that of trade unions. Policemen are only brought into conflict with trade unionists if in the course of picketing, or in some other way, they break the law. That is to say the interests of policemen are opposed to the interests of criminals. But in that sense, so are everybody's interests.

On the occasions when the contradictory position of the police is mentioned we are simply referred to the author of an article in the *New Left Review* written in 1976. Another example of broad assertion and slender authority is the suggestion that the drawing of policemen from working-class backgrounds was an "explicit policy" designed to remove the task of controlling dissent from the middle and upper

classes and thus to deflect popular resentment. Whether this is true or not it is not adequately supported by the injunction "See Silver, 1967" (an American symposium essay).

This mock scientific use of the "See Blagov, 1962" form of reference seems sadly to have caught on among social scientists. It often seems not to matter much who is clearly reporting an empirical fact or inventing a term (a fairly harmless example in the discussion of police working to rule, "blue flu" and "sick-in" is the author's "See Burpo, 1971"). But the extension of this abbreviated procedure to historical and evaluative questions of a more complex kind is a different matter.

The empirical content of this study is inherently important and is interestingly presented and analysed. But its larger assumptions about the role of the police and the background commentary should be treated with more than the usual amount of caution. Or, perhaps, come to think of it, with the same amount as usual.

Geoffrey Marshall

The democracy dilemma of the trade unions

Conflict and Democracy: studies in trade union government by John Hemmingway
(Clarendon Press, £6.50)
ISBN 0 19 827418 1

Since at least the beginning of this century, when Michels and the Webbs made their notable contributions, the question of democracy within the labour movement has been a continuing focus of discussion within the social sciences.

As the power of trade unions in our society has grown the government of trade unions has also been regarded as an important policy issue. Views on it are often ambivalent however; union leaders are expected to act democratically, carrying out the wishes of their members, but they are also expected to control those members "responsibly", in the "national interest". Dr Hemmingway's fresh contribution to the debate recognizes these two sources of interest in union government, and rightly acknowledges that there are no final answers to the "democracy dilemma", and no answers at all unclouded by values.

Three quarters of his book consists of careful detailed reconstructions, based on documentary sources and interviews after the event with key participants, of three cases in

which union members overtly challenged their leaders. The first and best known of these is the emergence in 1960 of the National Seamen's Union Movement from the National Union of Seamen with the aims of transforming the union from the inside and replacing the existing leadership; aims which were in large part achieved though only after protracted struggles. The dispute between Bridgford branch of the National Union of Railwaymen (all employed by a bus company) and the union leadership raised the issue of local versus national aims and interests and led eventually to an agreed transfer of the majority of the busmen to another union. The third case concerned the formation in 1969 of a breakaway union of Cooperative Insurance Agents after continuing disagreements about the correct policy to pursue when new rates of commission were introduced by the employer.

In all cases the author shows clearly how disagreements over substantive issues developed over time into struggles for control within the union, struggles where emotional involvements and issues of "principle" led to the conflict being continued long after the initial issue had been resolved or superseded.

These narratives are informative and interesting in themselves, but they also provide something more ambitious, a "large-scale model" of union government.

In a clear critique of previous discussions of union democracy Hemmingway claims convincingly that the views that members can control their leaders either through participation, or through organized opposition in factions, or through expressions of dissatisfaction, are each inadequate. All three means may be used in appropriate circumstances. It is more useful to observe situations of conflict between members and leaders as means of assessing union government. Such conflicts will be determined by structural sources of differing interests within the union and the subjective states of mind of the actors. They tend to proceed from the use of constitutional means, through the use of manipulation, to the use of coercion, as strategic options are exhausted and more powerful but more risky resources are drawn on. Whatever the outcome the possibility of future conflict remains.

This approach provides a clear and appropriate framework for the presentation of the case studies, which hardly surprisingly but nevertheless fairly convincingly illustrate the value and applicability of the categories provided. Two main weaknesses can be suggested. By considering overt conflicts between leaders and members Hemmingway has chosen situations which suit his case. It may be much less easy to apply his model to the more usual events of everyday union government. Secondly, he

does not fully acknowledge that his model directs attention away from covert uses of power; leadership control over members may most effectively be exercised through prevention, rather than ever realising the nature of their "real" interests.

Despite such limitations this book can be recommended to all with interests in union democracy, whether academic or practical. As a contribution which combines new lines of analysis with detailed examination of empirical situations it is certainly valuable and will carry the debate forward.

Richard Brown

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Class struggle and the NHS

Class Struggle, the State and Medicine: an historical and contemporary analysis of the medical sector in Great Britain
by Vicente Navarro
Martin Robertson, £7.95
ISBN 0 85220 248 3

Navarro sets his face against an array of conventional wisdoms. So, the present shape of the NHS, before and after reorganization in 1974, can only be understood by looking back to the Industrial Revolution, in any case, explanations for the particular structure, failures and difficulties of the NHS are to be found not within the organization itself, but in the society of which it is part, and which constructs it. And he directly challenges more familiar accounts, in that the eventual implementation of the NHS, as well as of its significant predecessors, is to be seen not as the outcome of some clear-sighted benevolence by any government, but in response to specific economic and political forces.

... generated by a conflict between social classes and factions of these classes.

It is a pity that the promise of this short book fades. Navarro is probably right that his interpretation "represents a minority voice". He is also partly right that "popularity... will be nil" in the "corridors of power or academic life." I suspect, though, that this will be less because of any antipathy, at least in universities, to Marxist analyses and rather more because of critical weaknesses of exposition.

For this, together with his attempt, laudable as it undoubtedly is, to write plainly for a general audience, has led to a desperate simplification. Thus after time, his argument is truncated almost out of existence, leaving no more than unsupported assertion precisely where he takes issue with more traditional accounts—that is, on the very points whose evidence is needed if he is to convert the conventional to his interpretation.

On top of this, despite his own criticism that too much writing from the left is empirically weak, he weakens his own analysis by relying on secondary sources and by evading, problematically, the identification of class position. His idiosyncratic classification of four middle classes, elides the tricky problem of sorting out the manual and routine elements from the intellectual or personal service work, even though his whole analysis rests on class relations.

due to a powerful form of analysis, emphasizing dialectics of action and understanding between past and present.

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BOOKS

Paths of development

Economic Growth in Britain and France 1780-1914: two paths to the modern century
by Patrick O'Brien and Caglar Allen & Unwin, £8.50
ISBN 0 04 330388 2

It was no doubt all too probable that the materialistic preoccupations of the 1950s would exercise a particularly powerful domination over a subject such as economic history. The more the blame for the economic stagnation of the nineteenth century France was laid on the shoulders of the French people, the more the blame for the economic success of Britain was laid on the shoulders of the British people. The result was a kind of economic determinism, in which the French path was more a matter of fate than of choice.

Most of this has already been demolished. The idea that the French economy was "retarded" in the last century or that the British economy was a model from which other European societies deviated at their peril have already been shown to be false. Far from over-estimating an archaic view, this book is a new one.

The authors argue that the economic growth of the nineteenth century and therein lies both its genuine interest and its real merit. Briefly, the authors argue that the greatest single cause of the greater per capita wealth in Britain was the greater size of the "foreign" sector of the economy, earnings from activities outside Britain and the excess of imports over exports. The British share of the world's total output was always lower than in

French industry except for a brief period in the 1880s. In effect, the benefits of large factories did not outweigh the relatively high value added per worker in many French finishing trades and workshops. Discounting the "foreign" sector, the residual difference in per capita wealth in Britain was probably caused mostly from the greater value of output per worker in agriculture. Here the British superiority was due to a much larger amount of land per worker, which the authors ascribe to differences in the historical experience of the two countries, and was also related to the much higher share of animal products in the total composition of British agricultural output. Yields on arable land in Britain were also higher, perhaps due to having more organic manure, but this made less difference. Such conclusions direct one more well-aimed blow at the idea that industrial "revolutions" and large factories were central to economic development. These were rather the less happy experience of countries with particularly raw material endowments, which without the potential to develop in a less socially disruptive way.

Obviously the statistical data which lead to such conclusions and the methods by which they are handled will continue to be argued over. The deficiencies of the British data are great, so are those of the French. Conclusions are therefore difficult. French "employment" figures are not the same as British "occupation" figures. Industrial output in Britain has often to be calculated by indirect methods; moreover, the authors use the British figures. Part of the large agricultural labour force in France was probably working in domestic industries. Tanton's estimates of French agricultural output, which the authors use throughout, are not too reliable in the light of recent research.

The ways which the authors devise to make their own comparisons have their particular merits. They omit the service sector also.

Alan Milward

The long march of British industry

The Growth of British Industry
by E. Musson
Basil Blackwell, £4.50
ISBN 0 7134 1242 9

There is no shortage of histories of British agriculture, trade, transport, shipping or banking; yet in industrialized country, until Professor Musson's venture, general histories of British industry have been rare.

The reasons for this are obvious enough. Industry today accounts for a large slice of the whole field of the country's economic history. Even when, in earlier centuries, industry took second place to agriculture, the historical foreground was to be the key to economic growth from the Industrial Revolution onwards draws a disproportionate attention to the relatively small-scale industrial developments of that period.

Professor Musson has stepped unobtrusively into this breach and offered a general history of British industrial development from the twelfth century to 1939. He has covered the Middle Ages, not because of the relative lack of importance of industry then but because before 1500 industrial change was "comparatively slow". He chooses to cut short his story at the outbreak of the Second World War because this was

ushered in "a considerable restructuring" of British industry, and because the postwar period has experienced the massive growth of state intervention.

Given that the whole long march of the history of British industry is a history of change as well as of changing government policy, it is not surprising that Professor Musson's venture, general histories of British industry have been rare.

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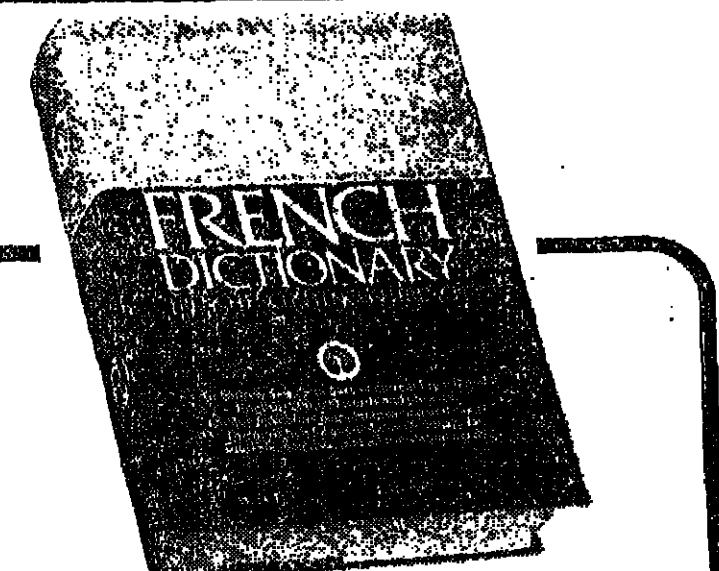
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M. W. Fynn

BOOKS

The ageing process

Endurance of Life: the implications of genetics for human life by Sir Macfarlane Burnet
Cambridge University Press, £8.95
ISBN 0 521 22114 5

Sir Macfarlane Burnet is a distinguished Australian scientist who has been awarded the Nobel Prize for his contributions to the study of immunology. Since his retirement he has turned his attention to the ageing process and in this book he has attempted to put his ideas on the nature of ageing in terms intelligible to non-scientists.

One of the features of the last two decades of the twentieth century will be the very large proportion of the population which will be made up of older people. At the beginning of the century about 6 per cent of the population consisted of the over sixties, now the figure is moving at pace and by the end of the century will approach 25 per cent. The great increase in survival into older age is a result of advances in medicine and surgery and social and economic conditions which have occurred during the century. These advances have benefited particularly children and young adults and as a result the very large mortality which used to occur in childhood and during the early life has been almost eliminated. However, although the average age of the population is increasing the maximum length of the human lifespan has not changed.

Centenarians remain uncommon and it is still exceptionally rare for anybody to survive beyond the age of 110 years. Extending the same point in another way, the average life expectancy at birth has increased considerably since the beginning of the century but the average life expectancy at age 65 has increased much less.

This and much other evidence have suggested that the human lifespan is finite and under the control of some sort of "programme". Studies in animals and in isolated tissues as well as in humans have suggested that each cell of the body has a finite lifespan and a number of theories have been put forward to account for this. A theory which is currently receiving scientific support proposes that ageing is caused by the accumulation of "errors" within the cells. Throughout the lifespan the chemicals which make up the active processes within the cells are constantly being used up and renewed. The renewal process involves "copying" the chemical structure from a template of DNA. The error theory of ageing proposes that errors are introduced into this copying process so that proteins of abnormal composition

are produced. With the passage of time, either such a large number of abnormal proteins accumulate that there is not enough normal material for cellular survival, or an abnormal protein with properties which are lethal to the cell is produced.

The author has taken the error theory as the basis of his discussion and demonstrates at the molecular level how this could be the mechanism of cellular ageing. He has added a genetic basis to the error theory by suggesting that errors are not entirely random but are under genetic control. The discussion of his theories on ageing is interesting and convincing and naturally he pays considerable attention to the immunological implications of ageing. As an example of a pathological process which appears to be due to errors in DNA he devotes a chapter to the rare skin disease of xeroderma pigmentosum. In a discussion of age-related disease cancer is considered in some detail, but the section on arterial disease is inadequate. The author seems to be unaware of some of the more recent work on the origin of atherosclerosis which suggests that the pathological process originates from an abnormality in a single cell of the arterial wall, a suggestion which would fit in with his ideas on the ageing process.

However, only a proportion of the book is taken up with the ageing process. The author also contributes fairly large sections to discussions of topics such as eugenics, euthanasia, genetic aspects of behaviour, abortion and the survival of severely deformed children. Many of these discussions consist of personal opinions and have little relationship to the scientific background which is said to be the theme of the book. The author's ideas on these topics are rarely original and some have fallen into justifiable disrepute. These sections detract from the main theme and give a rambling and repetitious style to the whole of the book.

The impact of the ageing population on Western society will be so great that widespread discussion of the ageing process and its implications is needed. This discussion will have to be based on balanced and well-informed accounts of the biology of ageing, and of the impact of further advances of medical knowledge and of social and economic changes on the elderly population. This book contains many interesting and provocative ideas on ageing but its effect is impaired by the amount of space given to extraneous and irrelevant matters.

R. W. Stout

The present state of genetics

New Approaches to Genetics: developments in molecular genetics edited by P. W. Kent
Oriel Press, £9.50
ISBN 0 85362 169 1

Human Genetics by J. H. Edwards
Chapman & Hall, £1.75
ISBN 0 470 99056 1

In 1941 J. B. S. Haldane produced a book called *New Paths in Genetics*. It had 200 pages, and in them Haldane interpreted the subject from a formal interpretation of genetic transmission to the biochemical and developmental action of genes, and the particular problems of human heredity and malformation. In 1959 G. Pontecorvo wrote *Trends in Genetic Analysis*. This expounded the problems and possibilities of molecular (for more strictly, fungal) genetics, describing work which has led on to the excitement of genetic manipulation. In 1962 *New Patterns in Genetics and Development* by C. H. Waddington was published, linking gene action and its control with the formation of morphological structure and pattern, posing problems which are still unresolved.

How does Kent's *New Approaches to Genetics* fit into this unfolding sequence? Does it mark the next stage of a maturing science and signal future developments? I regret to say, no. In the first place it is a symposium of 16 papers given at a meeting in Oxford in 1976. Multi-authorship can be tedious on the grounds that no person can nowadays cover the intricacies of a modern science.

But even a gathering of geneticists ought in principle to look clearly and comprehensively at their subject in a way that communicates the present state and realistic hopes of their practice. *New Approaches* does not even attempt to do this. Thirteen of the chapters are neither more nor less than specialized research reviews of the sort that presents and criticizes individual experiments rather than principles from experiments. This is not to denigrate either their content or quality, although it does restrict their value as vehicles of communication.

Biological classification is now possible at the whole organism level, the light microscope level, the electron microscope level, and latterly at the biochemical level. *New Approaches* is really a description of characteristics at this latest degree of resolution. Biochemists have begun to do for molecular systems what Linnaeus did for species. Elton for ecology, and Darwin for evolution. They are indulging in the taxonomy which is a necessary, albeit highly sophisticated, preliminary to the cogent simplifications which mark a new stage in any science.

There is some evidence that the complexity of this book recognizes this fact because the last three chapters are devoted to an analysis of explanation in biology. The link with the earlier chapters is tenuous but suggestive. *New Approaches* is not so much a compendium or guide to the future of genetics, as a case study of the

complexities inherent in producing a stop forward in science.

It may be objected that I have paid scant attention to the individual contributions, and have attempted to evaluate their scientific worth. True, but a book of this kind ought to be judged by its ability to convey its message. *New Approaches to Genetics* is a very distant view of the subject of recombination and its misable traits which is the subject matter of genetics proper, and does not give much guidance to the serious traveller, and biologists searching papers have to be extremely well written to be understandable to even normally educated scientists—generally speaking the 28 authors who contributed to this book do not manage to rise above cliché.

The books by Haldane, Pontecorvo and Waddington which I referred to as a series of milestones: there is probably a lesson in discipline here for intending authors and over-assiduous publishers. John Edwards's *Human Genetics* is very different. It is the latest in the "Outline Studies in Biology" series and is based on the author's lectures to medical students in Birmingham. It is packed (perhaps rather too well packed) with information and concepts and is written by both doctors and biologists. It will take its place with Sir Cyril Clarke's *Human Genetics and Medicine* and Cedric Carter's *Human Heredity* as a book more likely to be bought and read by students than larger text.

R. J. Berry

Analysing an unknown quantity

Mitochondria: structure, function and assembly by P. A. Whittaker and Susan M. Danks
Longman, £3.25
ISBN 0 582 44382 2

The factors controlling the assembly of mitochondria and the functional mechanisms of the system once assembled, have been major problems in biochemistry for many years. The fact that we do not yet know in any detail how the system works in generating ATP is testimony to its complexity. Any attempt to make a coherent synthesis of the developments along the rapidly developing fronts in this field is an unenviable task whether done with students or experts in mind. The authors claim this book is for advanced undergraduates and it is well illustrated with numerous diagrams (one to every other page) and EM pictures. Although a small book none of the topics is treated superficially, from the purely technical—dealing for example with isolation of mitochondria and

constituent macromolecules and methods of determining organelle permeability—to the more abstract topics of mitochondrial genetics and the mechanism of oxidative phosphorylation.

Starting with an excellent introduction (possibly the best part), the book deals mainly with aspects of membrane assembly and function with metabolism relegated to 22 pages. This is about right since the most significant recent advances have been made in mitochondrial biogenesis and, in any case, diagrams and discussion of the TCA and urea cycles do not change much from one text to another. Emphasis is placed on the structural organization of the ATPase complex (the tripartite repeating unit of enzyme and coupling factors) and of the sub-unit complexity of cytochrome oxidase, these structures exemplifying the close relationship between the nuclear and mitochondrial genetics systems.

The intriguing problem is taken up as to how and where the individual components coded by the two systems are assembled together with

lipids and carbohydrates for abundant glycoproteins. The interest is that a knowledge of these procedures may elucidate the function and mechanism of these membrane complexes.

An account of the ultrastructure, biochemistry, replication and transcription of mitochondrial DNA is given in detail as well as that of organelle translation machinery. Unique features and bacterial affinities are pointed out and discussed ultimately in an evolutionary context, an aspect that few of us consider exciting but find useful to students. Throughout, special emphasis is made to the yeast mitochondria system since this organism is the most suitable for studies at the moment.

The book is well balanced and well written and, although full of factual information, is not dull. It will surely achieve its aim of filling a gap in undergraduate texts on the subject but will also be a useful and handy reference book for specialists.

David Widdie

Research in germination

Physiology and Biochemistry of Seeds in Relation to Germination, volume one: development, germination and growth by J. D. Bewley and M. Black
Springer-Verlag, £22.50
ISBN 0 387 08274 3

Seeds have a remarkable life with two periods of intense activity separated by an intervening phase of quiescence. Development is therefore a period of very active metabolic change as the seeds enlarge and fill up with reserves, but later metabolism slows down, the seeds cease growth and finally dry out. The mature, dry seeds remain viable for extended periods with a metabolism so slow as to be near the limit of easy detection. When the seed is allowed to imbibe water, metabolism perks up again, growth is resumed (unless the seeds are protected by some dormancy mechanism) and the reserve materials are used up. The seed ends its life as it gives birth to the seedling and mature plant.

Seed physiology presents problems to the academic botanist, to the seedman, the miller and the brewer who use seeds, and to the plant breeder anxious to produce seeds of higher nutritive value for man. With so many approaches to seed research it is inevitable that the literature has become scattered through a variety of agricultural and scientific journals. Added to this, the dozen or two species that have been subjected to close scrutiny each have their own special idiosyncrasies.

From the mass of literature available Bewley and Black have distilled a compendium of the best, which will certainly prove to be a valuable source of reference for lecturers, research workers and student scientists. In this, the first of two volumes, the authors begin by considering seed development and the structure and function of the mature seed. Two thirds of the book is concerned with imbibition, germination and seedling growth. Problems of seed longevity, dormancy and effects of the environ-

ment are reserved for the second volume. The book is clearly written, with sufficient graphs and tables to allow a critical appraisal of the major experimental findings. It has an encyclopaedic quality and will surely become the standard work on seed physiology for the next few years; nothing quite so comprehensive, dealing with seed biology as well as seed germination, has been published in English in the past 20 years. The book is a valuable addition to the literature on seed biology; and that seems to me a high commendation. The separate extended essays, though, are not so much the highlight of the book as the well-referenced and carefully selected picture of seed life that emerges.

A large part of the story has still to be told at the descriptive level, but we have a picture of what happens, and we are still rather ignorant of the control of events. The exception to this concerns the mobilization of reserves in cereals, an area that only takes place once germination proper has already been completed.

E. W. Simon

BOOKS

Farming ecology

Conservation and Agriculture edited by J. C. Hawkes
Duckworth, £14.00
ISBN 0 7156 1032 5

Conservation is one of the most important activities of late twentieth-century man. If this statement causes raised eyebrows it shows how unsuccessful biologists have been in communicating their findings to the public in general and to legislators in particular. A perusal of today's press, television and radio broadcasting confirms this conclusion: the nature of conservation is dangerously misunderstood.

Conservation and Agriculture is an important and valuable book because it shows what conservation is really about. This is remarkable, because accounts of symposia rarely make easy reading or even instructive. Success has been achieved in this instance by the quality of the constituent papers and by the skill with which Professor Hawkes has edited the discussions so that they enhance the subject matter of the papers and give form and direction to the whole book. It is based on part of a symposium entitled "Man and His Environment", which was organized in 1975 to celebrate the centenary of the founding of Sir Josiah Mason's Science College, the parent institution of Birmingham University.

The first part of the book is concerned with the past, for today's environmental crisis cannot be understood without reference to human history—from the long period when man was a rare species and yet because of his use of fire and the invention of agriculture had an effect out of proportion to his numbers on the dangers and opportunities of modern technology. So far, agriculture has been successful in perpetuating itself on the more robust soils, but on the more fragile ones it has led rapidly to degradation and the formation of deserts. Shifting agriculture still

feeds 250 million people, but a small increase in soil can destroy the ecosystems on which it depends.

Several contributors point out the dangers of introducing wholesale technologies developed in the temperate regions into the tropics. Local systems should be improved by local methods. Crop trees, bushes and ground plants should be grown in new agricultural ecosystems with similar structures to the natural ones they are replacing. The term "Green Revolution" is criticized constructively.

So far, man has domesticated less than 100 plant and less than 50 animal species out of the thousands available. However, the immense potential for future domestication is being dangerously reduced, because natural ecosystems are being destroyed throughout the world on a vast scale and crop yields have been increased at the expense of genetic diversity. Therefore nature reserves, seed banks and the maintenance of stocks of endangered breeds of domestic animals are vitally necessary. The aesthetic value of nature conservation is not denied, but the first goal of conservation for most of the world must be to feed people now and in the future.

The theme of the book is balance. Conservation is not the opposite of development; the two activities are rightly seen as aspects of one environmental strategy. Society's failure to understand this fundamental point would greatly reduce the options for mankind in the future. *Conservation and Agriculture* shows how conservation must proceed: it must be based on the best scientific information available; it must be economically sound, and it must be related, both theoretically and practically, to agricultural policy. This means that hard political decisions must be made by nations and international agencies; some actions are urgent.

This stimulating book should help deepen understanding. It should be read by all who doubt that conservation is about the future of mankind.

Norman Moore

Environment planning

Reconciling Man with the Environment by Eric Ashby
Oxford University Press, £4.25
ISBN 0 19 858327 3

Eric Ashby's cogently argued and well-documented analyses of democracy at work make fascinating reading. From them one sees how very governments are often doomed to be "muddling through". Ashby describes the political roles played by the self-interest lobbies, the public interest lobbies, the political decision-makers, the experts who advise them all and the apathetic majority which is capable of being stirred to interest only intermittently, when an issue becomes newsworthy. The politician's role as the most difficult one to fulfil well, life is the responsibility for safeguarding the non-quantifiable values in our way of life. He must sense exactly how much restrictive legislation the public will accept or support against a self-interest lobby. He must eschew the party machine, he must not accept uncritically the expert advice he is given, nor must he provide a solution simply on the grounds that it causes the least friction. What he can do depends on the degree of public feeling to the solution proposed. Ashby sees that major issues are seldom resolved completely at one time.

In the environmental context his observations are at the same time alarming and alarming, the storm stemming from the extent to which the book might engender complacency. Just as 5 per cent employment in 100 per cent unemployment to the individual concerned, so Western democracy, in the face of extinction, would gain little comfort from the knowledge that the human societies of the future were evolving elsewhere.

We do not know if a final holocaust is already inevitable but equally, we cannot be sure that our present rate of progress in environmental matters is sufficient to ensure survival. If Ashby's diagnoses are correct, our future may lie largely in the hands of the media and the public interest lobbies; the latter struggling to maintain an image of integrity while scavenging for newsworthy items and the former using their skills to fan the colours of public apathy into the flame of public involvement.

An intriguing part of this book is the analogy drawn between democratic development and evolution. Both move slowly in small, uncertain steps. It is harder to accept that survival is the only objective guiding us. Perhaps we may not have to. Though regressions have been common, there does seem to have been an overall increase in individual altruism and cooperation between human populations. The same developments seen in the complex ecosystems made possible by the evolution of diversity. The riddle of the survival of the "unselfish" gene may soon be solved in the as yet uncharted waters of "group selection". If it is, our moral objectives may be reflected in the evolutionary process.

The book is full of little gems of judgment over the whole range of specialist fields involved, for example, that cost-benefit analysis cannot be an efficient way of determining an objective, only an efficient way of attaining it. You will clean away with them all, but you cannot fail to be stimulated.

John Cousins



The Evolutionary Ecology of Animal Migration

R. Robin Baker

This is a stimulating and beautifully illustrated book which will be an immensely valuable source of reference for biologists with interests ranging from ecology and behavioural studies to conservation and wildlife management. Drawing on a vast and widely scattered literature it has three essential aims: to rationalise the many different interpretations of the term 'migration', to construct and evaluate a model of migration in terms of current evolutionary theory, and to review the great variety of migration patterns shown by animals, both vertebrate and invertebrate. This treatment allows new interpretations to be made of existing information and it will inevitably provoke discussion. The book also presents the first serious attempt to integrate the movement patterns of humans within the general framework of migration.

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This new book for students of biology, agriculture and medicine provides a bridge between elementary accounts of population genetics and more detailed texts. It is well illustrated and adopts a novel approach, in that it not only examines fundamental introductory material but also describes in simple terms several more advanced topics. Examples have been used to maximum effect to include traditional ones, such as chromosomal inversion in *Drosophila*, as well as more recent studies using gel electrophoresis to examine enzyme variation.

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Sets of microscope slides of named pollen types are available from Philip Harris Biological Ltd.

The Study of Man

Second Edition

E. J. Clegg

This second edition reflects the rapid development of a comparatively young discipline which cuts right across the traditional boundaries of the biological sciences. The treatment, which is essentially ecological, stresses the interaction of heredity and environment. Conventional chapters on genetics, evolution, growth and senescence provide a background for a discussion on how successful Man has been in the past and some principles of demography and population biology are introduced. The book is designed for students of biology, medicine and related sciences in sixth forms, colleges and universities.

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Further information and inspection copies are available on request.

Hodder & Stoughton, Dept. E1485, P.O. Box 702,
Mill Road, Dunton Green, Sevenoaks, Kent TN13 2YD.

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Geographic Medicine and the Practitioner

Algorithms in the Diagnosis and Management of Exotic Diseases

KENNETH S. WARREN & ADEL A. F. MAHMOUD, EDS.

This book is composed of algorithms for the diagnosis and treatment of a variety of protozoan, helminth, enteric and viral infections that fall into the category of exotic diseases. It makes information on such infections as malaria, cholera, tuberculosis, leishmaniasis and trichinosis readily accessible and will provide the means to cope with them quickly and effectively. Each of the 27 sections describes the life-cycle and epidemiology of a specific disease complex and presents syndromes, diagnosis and treatment. The algorithms (flow charts with accompanying text) begin with clinical observations and provide salient diagnostic indicators such as geography, water contact and insect bites; laboratory procedures and sequences of tests are carefully defined and treatment is recommended on the basis of a close examination of the latest information. Published October, price £17.50.

Originally published serially in "The Journal of Infectious Diseases", information and subscriptions through The University of Chicago Press, Journals Div., 5801 Ellis Avenue, Chicago, Illinois 60637, USA.

THE UNIVERSITY OF CHICAGO PRESS

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Universities continued

THE OPEN UNIVERSITY

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We have two vacancies: those appointed will be involved in the research and teaching of the discipline of biology and will also be responsible for the development of the discipline's future progress in the field of continuing education and to appropriate research groups. Successful candidates should have a good research record and teaching experience.

Applicants for the posts should be able to demonstrate an ability to write clearly and concisely. Applications should be sent to the Director, Open University, Milton Keynes MK8 9PE. Salary scale £13,000 to £27,000 plus pension and other benefits.

Polytechnics

TESSIDE POLYTECHNIC

Department of Electrical, Electronic and Computer Engineering. Applications are invited for the following posts:

SENIOR LECTURER ELECTRONIC ENGINEERING

to be primarily engaged in the teaching of digital electronics, with emphasis on computer hardware. Experience in digital computing is preferred, and applicants should have teaching and/or industrial experience in that field. Possession of a higher degree is desirable. Salary scale: Senior Lecturer £13,000 to £27,000 plus pension and other benefits. Applications should be sent to the Director, TESSIDE POLYTECHNIC, Borough Road, Middlesbrough, Cleveland TS1 3BA, and returnable within 14 days.

CITY OF BIRMINGHAM

THE POLYTECHNIC

DEPARTMENT OF SCIENCE

LECTURER II IN PHYSICS. Applications are invited for the post of Lecturer II in Physics. The holder of the post will be responsible for the teaching of physics to students on the B.Sc. (Hons) Physics and B.Sc. (Hons) Applied Physics courses. The holder will also be responsible for the supervision of practical work in the Department. The holder will be expected to contribute to the development of the Department and to the University as a whole. Salary scale: £13,000 to £27,000 plus pension and other benefits. Applications should be sent to the Director, City of Birmingham Polytechnic, 100, Broad Street, Birmingham B1 2PP, and returnable within 14 days.

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SUNDERLAND

THE POLYTECHNIC

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The appointment will carry out a series of research projects in the field of business. The holder will be expected to contribute to the development of the Department and to the University as a whole. Salary scale: £13,000 to £27,000 plus pension and other benefits. Applications should be sent to the Director, Sunderland Polytechnic, 100, Broad Street, Sunderland SR1 2PP, and returnable within 14 days.

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THE POLYTECHNIC

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DEPARTMENT OF APPLIED PHYSICS

LECTURER II IN APPLIED PHYSICS

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MANCHESTER

THE POLYTECHNIC

FACULTY OF ART AND DESIGN

DEPARTMENT OF INDUSTRIAL DESIGN

LECTURER II IN INDUSTRIAL DESIGN

Applications are invited for the post of Lecturer II in Industrial Design. The holder of the post will be responsible for the teaching of industrial design to students on the B.Sc. (Hons) Industrial Design and B.Sc. (Hons) Applied Industrial Design courses. The holder will also be responsible for the supervision of practical work in the Department. The holder will be expected to contribute to the development of the Department and to the University as a whole. Salary scale: £13,000 to £27,000 plus pension and other benefits. Applications should be sent to the Director, Manchester Polytechnic, 100, Broad Street, Manchester M1 2PP, and returnable within 14 days.

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LECTURER II IN BUSINESS

Applications are invited for the post of Lecturer II in Business. The holder of the post will be responsible for the teaching of business to students on the B.Sc. (Hons) Business and B.Sc. (Hons) Applied Business courses. The holder will also be responsible for the supervision of practical work in the Department. The holder will be expected to contribute to the development of the Department and to the University as a whole. Salary scale: £13,000 to £27,000 plus pension and other benefits. Applications should be sent to the Director, Sunderland Polytechnic, 100, Broad Street, Sunderland SR1 2PP, and returnable within 14 days.

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Leicester Polytechnic

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TEACHING COMPANY ASSOCIATES

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A salary in the range of £3800 - £5000 will be paid during the 2 year appointment and on completion the Associates may be offered appropriate company posts.

Application forms and further particulars are available from Dr J. Warren, Assistant Director for Technology and Construction, Leicester Polytechnic, P.O. Box 143, Leicester LE1 8BH. Tel. (0533) 60181 extn. 2806.

ULSTER POLYTECHNIC

Faculty of Technology

School of Maritime Studies

LECTURER II/ SENIOR LECTURER

Marine Technology

Salary Scale: £4,101-£6,558

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The Polytechnic is a direct grant institution with an independent Board of Governors. It opened in 1971 and now has a student population of some 7,100. It has extensive new purpose-built accommodation, including 750 residential places on the 114 acre campus overlooking the sea at Jordanstown, a pleasant and quiet residential area. There is a scheme of assistance with removal.

Further particulars and application forms which must be returned by October 30 may be obtained by telephoning Whiteabbey (0231) 65131, ext. 2243 or by writing to: The Establishment Officer, Ulster Polytechnic, Shore Road, Newtownabbey, Co. Antrim BT37 0QJ.

BRISTOL POLYTECHNIC

ASSISTANT REGISTRAR

REF: A3002/78

The post is established in the Academic Registry Division of the Polytechnic's administration. The main responsibilities of the appointee will involve activities relating to the Polytechnic's undergraduate course development including TEC/BEC awards and CNAAs degrees. Other duties will relate to the administration of Academic staff development activities and to examinations assessments and appeals.

A degree or equivalent professional qualification/experience is essential. Knowledge of course development and all the requirements of validating bodies and previous experience in a Higher Education context would be an advantage.

Salary Scale: Grade SO2 £4,820-£6,748 plus £312. Further details and application forms to be returned by the 5th November, 1978, to the Personnel Office, Bristol Polytechnic, Colindale Lane, Fenchay, Bristol BS39 1QY.

Please quote Post Reference Number A3002/78 in all communications.

City of Birmingham Polytechnic

DIRECTOR

The Governing Body of the City of Birmingham Polytechnic gives notice of its intent to advertise the post of Director, which becomes vacant on 1st September 1978 because of the retirement of Mr. S. W. Smithurst. (THESE)

Applications should be sent to the Director, City of Birmingham Polytechnic, 100, Broad Street, Birmingham B1 2PP, and returnable within 14 days.

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Principal Lecturer £7,047-£7,818 (Bar) £8,844
Lecturer Grade II/Senior Lecturer £4,101-£7,065 (Bar) £7,818

Application form and further details from The Assistant Director and Chief Administrative Officer, Trent Polytechnic, Burton Street, Nottingham NG1 4BU, Closing date 30th October, 1978.

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Application form and further details from The

Research Posts continued

BATH
THE UNIVERSITY
SCHOOL OF ELECTRICAL
ENGINEERING
RESEARCH OFFICER
SPECIAL PROCESSING
The post involves adding responsibility for a project on the processing of speech signals for a hearing aid with microprocessors and mini-computers. The successful candidate will be responsible for the design and development of a hearing aid system. The post is a full-time position with a salary of £10,000 per annum. Applications should be sent to the Director of the School of Electrical Engineering, Bath BA2 7AY, by 15th November 1978. Closing date: 15th November 1978.

Colleges of Further Education

LINCOLN
BUSINESS ASSOCIATE
COLLEGE
Lincoln, LNL 3DY
Applications are invited for the post of Business Associate. The successful candidate will be responsible for the day-to-day running of the college. The post is a full-time position with a salary of £10,000 per annum. Applications should be sent to the Director of the College, Lincoln, LNL 3DY, by 15th November 1978. Closing date: 15th November 1978.

Colleges of Further Education

Nene College Northampton
School of Humanities and Adult Education
HISTORY
Required for 1 January, 1979.

1. Permanent full-time lecturer (Grade I)

in History with a major interest in English Social and Economic History since the 18th Century. The ability to assist in American Studies or in Modern International History would be an advantage. This vacancy arises because of the promotion of a member of staff.

2. Temporary full-time lecturer (Grade II)

for one year only. To organise and teach United States History to 3rd and 4th year students taking the BA and BEd degrees (Hons). To share in the organisation and teaching of the History component of the American Studies Courses taken by students reading for the BA, BSc, BEd degrees (Hons). An interest in American visual arts and film would be welcomed.

The vacancy arises through the absence of the tutor for a one year study leave.

For application form and further details please write to The Senior Administrative Officer, Nene College, Moulton Park, Northampton NN2 7AL.

Colleges and Institutes of Higher Education

DURHAM COUNTY COUNCIL
New College Durham
Principal
Leonard G. Bowers
FACULTY OF
EDUCATION

Applications are invited for the post of temporary full-time Lecturer in Human Movement Studies.

The post is to be filled as soon as possible and will be held until 31st July 1979.

Applicants should preferably have experience of teaching in secondary schools, and should also be able to offer expertise in lecturing within the B.Ed. degree in one or more of the following areas:

Gymnastics, Games, Swimming, Philosophy of Physical Education.

Further particulars and application forms, returnable by 27th October, 1978, may be obtained from: The Principal, New College Durham, Framwellgate Moor Centre, Durham, DH1 5ES.

On receipt of a stamped addressed envelope.

LONDON
Ealing College of
Higher Education

LI/II in Economics

High academic qualifications, with business and/or teaching experience an advantage. A knowledge of industrial, public sector, management or financial economics preferred.

The post is tenable from 1 January, 1979. Salary: LI, £4,800 to £6,800 p.a. inclusive; LI, £3,800 to £5,700 p.a. inclusive.

Application forms and further details from The Chief Administrative Officer (TDO), Ealing College of Higher Education, St. Mary's Road, London W5 5RF. Closing date: 3 November, 1978.

Ealing

Colleges and Institutes of Higher Education

Faculty of Humanities: B.A.(Hons.) and B.Ed.(Hons) Courses

An ability to contribute to interdisciplinary work within the Faculty will be an advantage in any of the following three posts.

LI/Senior Lecturer in English

A higher degree, current research interests and ability to contribute to Shakespeare Studies and 17th and 18th Century English Literature will be an advantage.

LI/Senior Lecturer in French Studies

Temporary appointment expiring 31st August, 1980. High academic qualifications in an area of French Studies other than Literature are required.

LI/Senior Lecturer in Religious Studies

Temporary appointment expiring 31st August, 1980. A higher degree and current research are required. A Specialisation in Judaism or Modern Christian Theology will be an advantage.

Faculty of Environmental and Scientific Studies

Senior Lecturer in Environmental Subjects

Applicants should be graduates in Geography or an appropriate branch of Environmental Studies. They should have suitable qualifications or experience in Resource Management or Planning. Possession of a higher degree and experience of teaching at honours degree level will be advantageous.

Details and application forms from the Assistant Director (Staffing), Crews + Alsager College of Higher Education, Hassall Road, Alsager, Stoke-on-Trent ST7 2HL. Closing date: 3rd November, 1978.

Crews+Alsager College of Higher Education

Slough College of Higher Education

FACULTY OF
BUSINESS

LECTURER II IN ECONOMICS FOR BEC COURSES

Applications are invited for the post of Lecturer in Economics to teach mainly on Business Education Council (BEC) Higher Diploma and Certificate courses. Applicants should possess a degree in Economics and have two or more of the following:

- a) good teaching experience;
- b) good industrial/commercial experience;
- c) an ability to teach in another subject area in the business studies field.

Salary: £4101 - £8868 pa + £150 pa Local Allowance

Further details and application forms may be obtained by sending SAE to Vice Principal, Slough College of Higher Education, Wellington Street, Slough SL1 1YG to whom they should be returned within 14 days of the appearance of this advertisement.

HAMPSHIRE

SOUTHAMPTON COLLEGE OF HIGHER EDUCATION

Vice-Principal

Applications are invited for the post of Vice-Principal from 1st May, 1979. The successful candidate will have had wide experience in Higher Education to enable him/her to contribute to the development of the advanced work in the College.

Salary: £11,740. Further particulars and application forms are obtainable from the County Education Officer, Hampshire County Council, The Castle, Winchester, Hants, SO9 8UG, quoting reference FE/COL/SCHE, on receipt of stamped addressed envelope. Completed applications should be returned to the above address within 14 days of the appearance of this advertisement.

CHELMER
Institute of Higher Education

Principal Lecturer in Law (Research)

This post offers an exciting opportunity for a candidate with good legal academic qualifications and research experience to play a leading role in the development of research in the Faculty of Social Sciences. The appointee will be based in the Department of Law and will have teaching duties in the Department. There are presently 27 full-time staff teaching on the Department's honours law degree courses which has an annual intake of 100 students. It is currently developing post-graduate courses and has an active research programme which it now seeks to extend as the basis for the Department's future developments.

Application forms (returnable within 14 days of appearance of this advertisement) and further details from: The Secretary, Chelmer Institute of Higher Education, Victoria Road South, Chelmsford, Essex CM1 1LL, Chelmsford CM1 1LL.

General Vacancies

LECTURER IN AERODYNAMICS

Up to £6,900

The Royal Military College of Science is a residential college providing university standard education to Service men and women and to a growing number of civilians. The Mechanical Engineering Department runs first degree courses and also contributes to specialised MSc curricula and to Army Staff courses on specific practical subjects.

This appointment in the Applied Mechanics Branch will be made at either Lecturer or Senior Lecturer level depending on age, qualification and experience. Applicants must have a good honours degree in an appropriate engineering or science subject or mathematics, preferably with practical experience of aerodynamics. Knowledge of

helicopter aerodynamics would be particularly valuable. The successful candidate will have access to sophisticated laboratory facilities, including computer-linked low speed and supersonic wind tunnels, and will be expected to undertake advanced research or other studies.

Salary will be in the range £3,180-£4,410 for the Lecturer grade or £5,150-£6,900 for Senior Lecturer. Non-contributory pension scheme.

For further information and an application form (to be returned by 10 November, 1978) write to Civil Service Commission, Alencon Link, Basingstoke, Hants, RG21 1JB. Please quote ref.: S/9837.

Open University Productions SCIENCE

Applications are invited for one post at Production Assistant level. Candidates should have a good Honours Degree in Geology and at least two years' production experience.

The successful applicant will work on all aspects of the production of television and radio programmes for the Open University and will be expected to work on a wide range of subject disciplines. An informed interest in Science and desire to work in the fields of communication of Science by Television and Radio is essential.

Open University Productions is based at Alexandra Place but is expected to move to Milton Keynes in 1981.

Salary: £2165 p.a. (may be higher if qualifications are exceptional) x £195 to £2755 p.a. plus £410 p.a. for associated hours. Relocation expenses considered.

Telephone or write immediately for an application form, enclosing addressed envelope and quoting reference number 78.G.2580.TE, to: Appointments Department, BBC, London W1A 1AA. Telephone 01-580 4468, Ext. 4619.

BBC

Colleges of Education

NATIONAL REHABILITATION BOARD
In association with
UNIVERSITY OF DUBLIN, TRINITY COLLEGE

The National Rehabilitation Board in association with the University of Dublin Trinity College, invite applications for two posts in:

DUBLIN COLLEGE OF SPEECH THERAPY

10 Marlow Road, Dublin 4, which provides a full-time, three-year course for students taking a degree in Remedial Therapies.

Lecturer in Speech Therapy

The successful candidate will hold the Licence of the College of Speech Therapists or equivalent. Post-graduate qualifications would be an advantage.

Lecturer in Psychology

The successful candidate will hold a relevant qualification in Psychology. Post-graduate qualifications would be an advantage.

Salary scale for the full-time posts is £3,600 to £5,000 p.a. An additional allowance of £200 per annum for research will be awarded to holders of relevant post-graduate qualifications. Entry point on the scale will be determined on the basis of qualifications and experience. Applications should be sent to the above address within 14 days of the appearance of this advertisement.

Application forms are available from: The Secretary, National Rehabilitation Board, 24/25 O'Connell Street, Dublin 4.

Applicants are invited to send three copies and should enclose a curriculum vitae and a list of references. Applications should be sent to the above address within 14 days of the appearance of this advertisement.

THE TIMES
Higher Education
SUPPLEMENT

New Printing House
Square, P.O. Box 7
Gray's Inn Road,
London WC1X 0EZ

Miscellaneous

Archivist

Standard Telephones and Cables Limited, one of Britain's leading telecommunications and electronics companies, celebrates its centenary in 1983. There are plans for a company history, a major exhibition and a film.

To prepare for the centenary STC wish to appoint an archivist. The appointment will be for two years in the first instance. Once the successful candidate has established how much needs to be done, the period may be extended and the position might be made permanent.

Initially the job will involve visits to the company's UK locations to establish the extent and importance of written records, together with artifacts of historical interest such as early equipment. Later the material will be catalogued and, if this proves feasible, a central archive may be established.

While the centenary will act as the immediate focus of the archivist's work, the long-term aim is to ensure that all material of interest to future historians of telecommunications is preserved.

The successful applicant must be energetic, mobile and flexible. He or she is likely to have a good degree in a historical subject and - more importantly - to have sound practical experience in handling business records. Fair and experience matter more than academic brilliance.

There will be few candidates who combine these qualifications with detailed knowledge of telecommunications and electronics, and that expertise will be provided from within the company. An interest in science and engineering would, however, be an asset.

The position will be based in central London. Salary, terms and conditions will as far as possible match those of a permanent appointment. Applications, with details of age and experience, should be sent to: W. C. Wright, Manager HQ Personnel Department, Standard Telephones and Cables Limited, STC House, 190 Strand, London WC2R 1DU.

STC Changing the face of communications worldwide

Overseas

OVERSEAS DEVELOPMENT

KNOW-HOW vital to developing countries

Lecturer in Educational Psychology

Lesotho
To plan, teach and evaluate lessons in Educational Psychology to the pre-service and in-service students at the National Teacher Training College, Maseru, with particular application to the training of primary teachers; to prepare self-instructional materials in the subject, and to devise ways of using them as tools for learning; to build and review continually the subject test item bank; to undertake research in the subject and to help students with applied or practical research; to guide junior staff members in the subject department; to assist in the development of teacher education curriculum, and any other professional responsibilities which the College Director may give from time to time. Applicants, up to age 55, should have either a Degree in Education (main subject Educational Psychology) or a Diploma in Educational Psychology, together with a minimum of three years' teaching experience at either Primary or Secondary level, or in a Teacher Training College or similar institution.

Appointment 30 months. Salary in range £3,851-£6,828 pa including allowance, normally tax free, in range £1,974-£3,144 pa. Gratuity 25% pa of basic salary. (Ref. 315K). Other benefits include free family passages, children's education allowances and subsidised accommodation. An appointment grant of up to £300 and an interest free car purchase loan of up to £1,800 may be payable to certain circumstances. Superannuation rights may be safeguarded. Applicants should be citizens of the United Kingdom.

For full details and application form please apply quoting Reference, giving details of age, qualifications and experience to:-

Appointments Officer,
MINISTRY OF OVERSEAS DEVELOPMENT,
Room 301, Island House,
Stephens Place, London SW1E 5JH.

ODM HELPING NATIONS HELP THEMSELVES

Overseas continued

OVERSEAS TEACHING POSTS

HEAD OF ENGLISH LANGUAGE TRAINING

(Syria)

The Vocational Training Complex, Qabun, Damascus
To organise and participate in English Language training courses, production of ESP materials and re-training of existing staff, including selection of future instructors.
Qualifications: a degree in English or Modern Languages with 1 year university qualification in TEFL. Postgraduate qualification in Linguistics desirable. Five years overseas experience essential with materials writing or teacher training experience.
Salary: £5,000-£8,128 plus 10 per cent inducement.
Benefits: personal and children's allowances, free furnished accommodation, 2 year KELT contract, renewable. 78 WO 184

INSPECTOR OF ENGLISH

(Oman)

Ministry of Education, Baitnah Coast
To inspect schools, organise in-service training and assist with materials production.
Qualifications: candidates must only, must have a one year university postgraduate qualification in TEFL and TEFL experience, preferably in inspecting or teacher training.
Salary: £5,000-£8,128 plus 10 per cent inducement allowance.
Benefits: overseas and children's allowances, free furnished accommodation with free electricity and water, employer's portion of superannuation contribution, 2 year KELT contract, renewable. 78 WE 7

LECTURER IN ENGLISH METHODOLOGY AND TEACHING PRACTICE

(Yemen)

Faculty of Education, University of Sana'. Duties will include some teaching in the English Department.
Qualifications: Degree in English or Modern Languages from a British university plus a teaching qualification in TEFL and 5 years' experience (including some overseas) in teacher training centres.
Salary: £5,581-£7,707 p.a. plus 10 per cent inducement.
Benefits: personal and children's allowances, free furnished accommodation, 2 year KELT contract, renewable. 78 WV 93

HEAD OF ENGLISH DEPARTMENT

(Yemen)

National Institute of Public Administration, Taiz
To teach English up to Cambridge First Certificate level to mainly government employees.
Qualifications: candidates must only, must have a British educational background, postgraduate TEFL and 5 years' teaching experience.
Salary: £5,000-£8,128 p.a. plus 10 per cent inducement.
Benefits: personal and children's allowances, free furnished accommodation with free water and electricity, employer's portion of superannuation contribution, 2 year KELT contract, renewable. 78 WO 188

LECTURER IN ENGLISH LANGUAGE

(Singapore)

Ngee Ann Technical College
To teach general English and ESP, duties include materials preparation and testing.
Qualifications: Degree, 1 year postgraduate TEFL qualification and minimum of 2 years' experience.
Salary: \$1,315-\$2,420 per month. (Rate of exchange approx. \$4.3=£1).
Annual bonus and other benefits. 2 year contract. 78 PO 126

ENGLISH ADVISER

(Bangladesh)

University Grants Commission, Dacca. To develop an effective ELT/ESP policy and strategy, especially at tertiary level, for Bangladesh in co-operation with the UGC.
Qualifications: Degree, MA in Applied Linguistics or TEFL and substantial experience in TEFL, ESP and materials production.
Salary: £5,581-£7,707 p.a. plus inducement.
Benefits: overseas and children's allowances, free accommodation, 2 year KELT contract. 78 PU 157

ADVISER IN SERVICE ENGLISH

(Colombia)

Universidad Del Valle, Cali (for January, 1979).
To advise on materials production and assist with Evaluation of Service English materials and methods, to train teachers to use these materials, to lecture on Service English to undergraduates.
Qualifications: MA in TEFL or Applied Linguistics and 5-10 years' experience in TEFL and teaching. PhD and 2-3 years' teaching Service English Courses at university level desirable.
Salary: £5,581-£7,707 plus 10 per cent inducement.
Benefits: overseas and children's allowances, accommodation allowance. 2 year KELT contract. 78 PU 30

Return fares are paid. Local contracts are guaranteed by the British Council. Please write briefly stating qualifications and length of appropriate experience, quoting relevant reference number and title of post, for further details and application form to the British Council (Appointments), 65 Davies Street, London, W1V 2AA.

THE BRITISH
COUNCIL

LINCOLN INSTITUTE OF HEALTH SCIENCES Lecturer in Chiroprody

Applications are invited for a Lecturer in Chiroprody within the Institute's School of Chiroprody. Duties will include: (i) teaching in the undergraduate programme, (ii) assisting in the development of postgraduate courses, (iii) assisting the Head of School in all aspects of the administration and development of the School.
Applicants should have appropriate professional qualifications and considerable teaching and administrative experience. They should hold the Society of Chiroprody Certificate in Local Analysis, and be registered Teachers of the Society of Chiroprody.
The School of Chiroprody at Lincoln Institute in Melbourne commenced in February, 1978, when 18 students were admitted to the course and the post represents an opportunity to become involved both in the establishment of the School and the further development of the profession in Victoria.
Salary: £6,176-£8,128 p.a. Applications in writing, including the names of two professional referees, should be addressed to Assistant Registrar, Lincoln Institute of Health Sciences, 625 Swanston Street, Carlton 3053, Victoria, Australia.
Closing date: 30 November, 1978.

Miscellaneous continued

WEST HAM CENTRAL MISSION MEMORIAL CHURCH

409 Barking Road, Plaistow E13

YOUTH AND COMMUNITY WORKER

Applications are invited from committed Christians who are qualified and experienced youth and community workers or teachers with relevant urban experience, for the post of Youth and Community Worker for the club which is a part of the work of the West Ham Central Mission. The centre caters for the needs of a wide range of young people and affiliated groups.
Salary in accordance with the NAC Scale 4 for youth and community workers—£4,068-£4,524 (under review) plus 202 per cent London Weightings Allowance and current additional payments of £12 and £20.
Applicants for the post and details of duties are obtainable from Mr. Malcolm Stuart, Church Secretary, 160 Masterman Road, London E6.
Closing date—14 days from this advertisement.

AUSTRALIA

BUSINESS STUDIES

WIAE conducts three year Undergraduate Degree and Diploma courses in Business with a specialisation in Accounting, and a Graduate Diploma in Accounting. It has a vigorous and expanding External Studies program and appointees will be required to participate in this program. Two of the three positions advertised below are newly created. For all positions appropriate tertiary qualifications are required, preferably including a Higher Degree. Previous tertiary teaching and/or industrial experience is desirable but not essential.
Every attempt is made to accommodate the particular interests of staff in the allocation of teaching duties.

LECTURER IN MANAGEMENT

The appointee will be a person who can provide area leadership in Management Studies as well as possessing an interest in the Marketing Area. Duties will include the development, coordination, teaching and review of subjects in Administrative Studies, organisation theory and marketing at both the undergraduate and graduate levels. There will also be opportunities to become involved in related subject areas, for example, in the planning of a possible integrative business policy subject at the third year Undergraduate level.
An MBA Degree would be particularly appropriate for this position.

LECTURER IN

ACCOUNTING AND FINANCE

The appointee will participate in the development and teaching of Accounting and Finance at both the Undergraduate and Graduate levels.

SENIOR TUTOR

IN ECONOMICS AND LAW

The appointee will participate in the development and teaching of subjects in the Economics and Law areas.

Initially the appointee will probably be required to participate in the teaching of Corporate Law and the Faculty's innovative problems and policy oriented first and second year Undergraduate Economics subjects.

Opportunities may subsequently arise to teach Industrial Relations and/or Industrial Law. Applicants should have appropriate qualifications in Economics and Law.
The position may appeal particularly to a recent graduate or current final year honors student in Economics and Law.

APPOINTMENT

May be permanent or for three years in the first instance, with possibility of subsequent or earlier permanent appointment.

FURTHER INFORMATION
Available from Mr. R. J. Coultie, Head of Faculty of Business Studies, phone (055) 54 0286. Information regarding conditions of appointment, including removal expenses, may be obtained from the Staffing Officer.

Closes 10 November, 1978.

Written application stating qualifications, experience and giving sufficient information to indicate suitability for interview, together with the names and addresses of three referees should be addressed to the Staffing Office, Warrambool Institute of Advanced Education, Box 423, Warrambool, Victoria, 3280, Australia.



Warrambool Institute of Advanced Education

LIBRARIAN

to be appointed
Executive Director of
CLANN Limited - operated by
the NSW Colleges
of Advanced Education.

This is an important position for a Librarian with tertiary qualifications. Proven managerial experience, negotiating skills and independent initiative are essential attributes to this position. Eligibility for membership of the Library Association of Australia is an essential requirement.

Reporting to the Company's Board of Directors, the appointee will be responsible for improving the efficiency of the library systems operated by the Colleges of Advanced Education in New South Wales and must be capable of directing an automated library system.

Salary: Negotiable from \$Aust 20,693 p.a.

Applications: Forms are available from John Williams, Secretary, Interim Steering Committee, CLANN, New South Wales Higher Education Board, ADC House, 188 Kent Street, Sydney, N.S.W., Australia 2000 (telex 24420) or from New South Wales Government Offices, 56 Strand, London, W.C. 2N5LZ (01 539 6651) (telex 916 859) or from New South Wales Centre, 7 West York Street, New York, NY 10018. Phone New York (212) 552 6204 and should be lodged by 5 p.m. Friday November 17, 1978.

Colleges of Further Education

Bournemouth and Poole College of Further Education

Head of Faculty of Business
and General Studies
(Roadwarden)

Burnham Head of Department Grade VI

Salary: £9,345-£10,305 p.a.

The College, formed by the amalgamation of Bournemouth and Poole Colleges, is to be organised in two Faculties. That of Business and General Studies will contain five Departments and total more than 120 academic staff.
The Faculty Head will be responsible for the management of the Department within the Faculty and for control of physical resources on one of the main College sites.
Applicants must be graduates, preferably below the age of 45 with experience of managing a department or substantial unit in a large institution or in industry and must be interested in the application of modern educational methods to courses mainly of non-advanced students.
Application forms and further information may be obtained from the Secretary, Burnham, North Road, Parkstone, Poole (Tel: 0202 2201) to whom completed forms should be returned as a matter of urgency. (Previous applications resulting from earlier advertisements will automatically be reconsidered).
The appointment will take effect as soon as release can be obtained by the successful applicant.

Overseas continued

GOULBURN COLLEGE OF ADVANCED EDUCATION New South Wales

The present Principal of the College, Doctor W. K. Durrell has informed the College Council of his intention to retire in mid-1979. The Council therefore invites applications for and would welcome the submission of names of persons whom the Council may consider for the position of

PRINCIPAL

Applicants must have distinguished academic qualifications, proven teaching and organising ability, and a demonstrated capacity for academic leadership. The appointee will also be expected to have an understanding of and consultancy for the region which has limited provision of post-secondary education and must be able to maintain and nurture the relationship with the post-secondary institutions within and around the region.
The salary for the position is \$A\$11,500 p.a. with an expression of interest of \$A\$600 p.a. A substantial contribution will be made to the reasonably costs for future and removal expenses of the successful applicant. Housing is available at moderate rates.

Further information is available from the Chairman of the College Council, Mr. E. J. McDermott, or from the College Secretary, Mr. L. Hughes.

The Council reserves the right to make no appointment or to appoint by invitation.
Applicants giving personal details, qualifications, relevant experience in outline of present position, a prospective date when they will be available to commence duty, and a recent photograph, should send them to the Chairman of Council, Goulburn College of Advanced Education, McDermott Drive, Goulburn 2580, N.S.W., AUSTRALIA, by 15th November, 1978.

Personal continued

David should be in a home, not a Home

David is a three and a half year old with sandy hair, blue eyes and we think that if you saw him you would agree that he should not be living in a residential nursery where he has been for the past two years. He is growing up in a family. He seems a bright and playful imaginative and he loves being read to. He is a bit of a mischief maker and he sometimes runs into himself and sucks his thumb and at other times he is belligerent and rather restless. He is conscious of his mother's difficulties who will not be visiting him in the foster home, but his social worker will take him to his foster home for the rest of his childhood, but as they take some time to settle we are prepared to pay an enhanced boarding out rate of up to £40 per week.

You would like to find out more about David contact Margaret Trevel, Team Leader, Adoption and Foster Placement, Westminster Social Services, City Hall, London, SW1. Tel: 01-429 8070 Ext. 2258 or 2264.

The T.E.S. goes to work.

The TES now provides on its "School to Work" page each week, specialist news coverage of the developing - and controversial - relationship between education and industry and the transition from school to work.

Industry and education need to know about each other. They also need to keep tabs on the rapidly growing activities of the agencies and organizations, public and voluntary, that deal with young people.

The "School to Work" page supplements the attention being paid throughout the paper to the needs and interest of industrial trainers, careers specialists, youth workers, and all those concerned with equipping the young for a full adult role.

The Times Educational Supplement's coverage of education has always been broad, and it has regarded industrial training and youth affairs as part of its field. In the past two years the growing national and professional concern has been reflected in the increased space and prominence given throughout the paper to these matters. The most important developments and initiatives by central government and others, such as the new national programme for school leavers, are often disclosed or foreshadowed in the TES before you can learn about them from any other source.

TES - The weekly for news about education at all levels - including vocational training.

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